

#19 March/April 1988

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□ LEO SCHWAB: INFO INTERVIEWS THE OUTRAGEOUS "DEAN OF DISPLAY HACKING"

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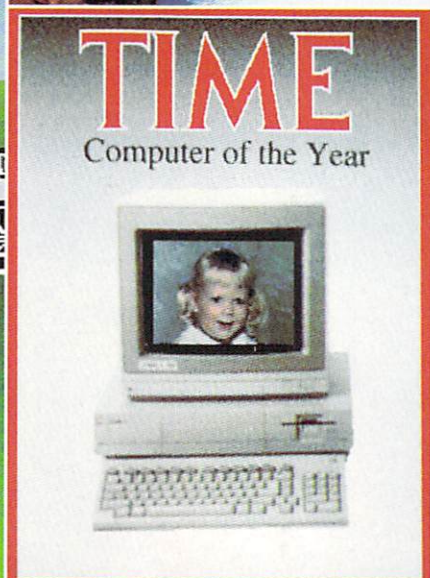
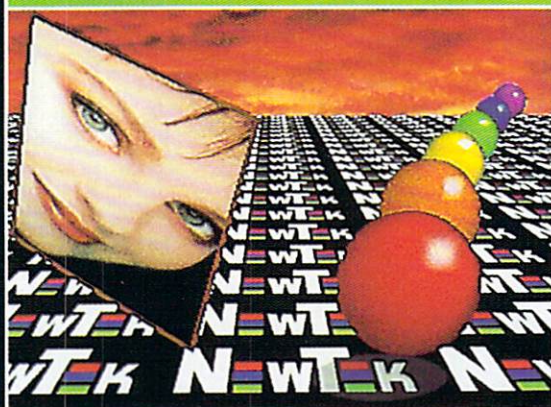
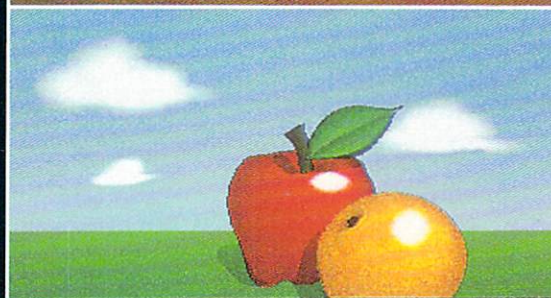
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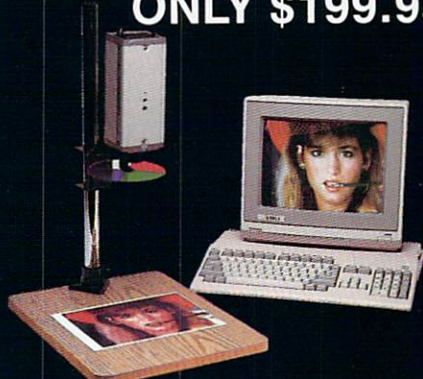
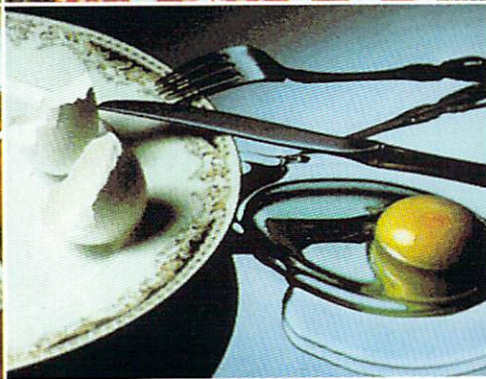
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Benn Dunnington

Publisher, Editor, Founder

Mark R. Brown

Senior Editor, Tech Editor

Tom Malcom

Assistant Editor, Data Manager

Megan Ward

Art and Production Manager

ASSOCIATE EDITOR

Jim Oldfield, Jr.

CONTRIBUTING EDITORS

Don Romero

Warren Block

Karl T. Thurber, Jr.

Advertising Sales

Carol Brown

(319) 338-3620

READER MAIL:

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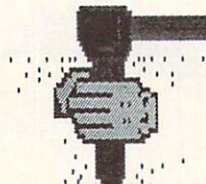
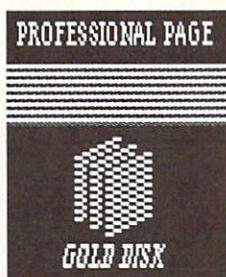
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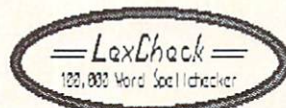


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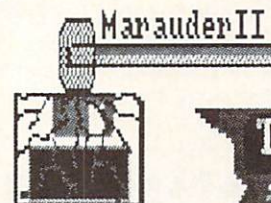


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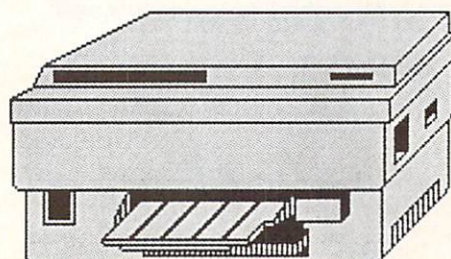


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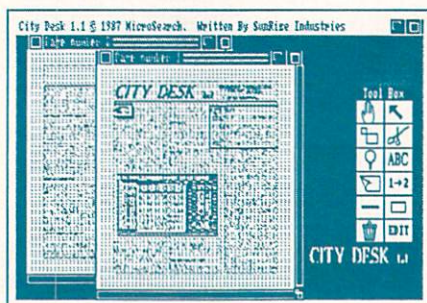
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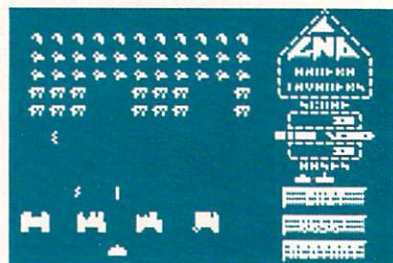
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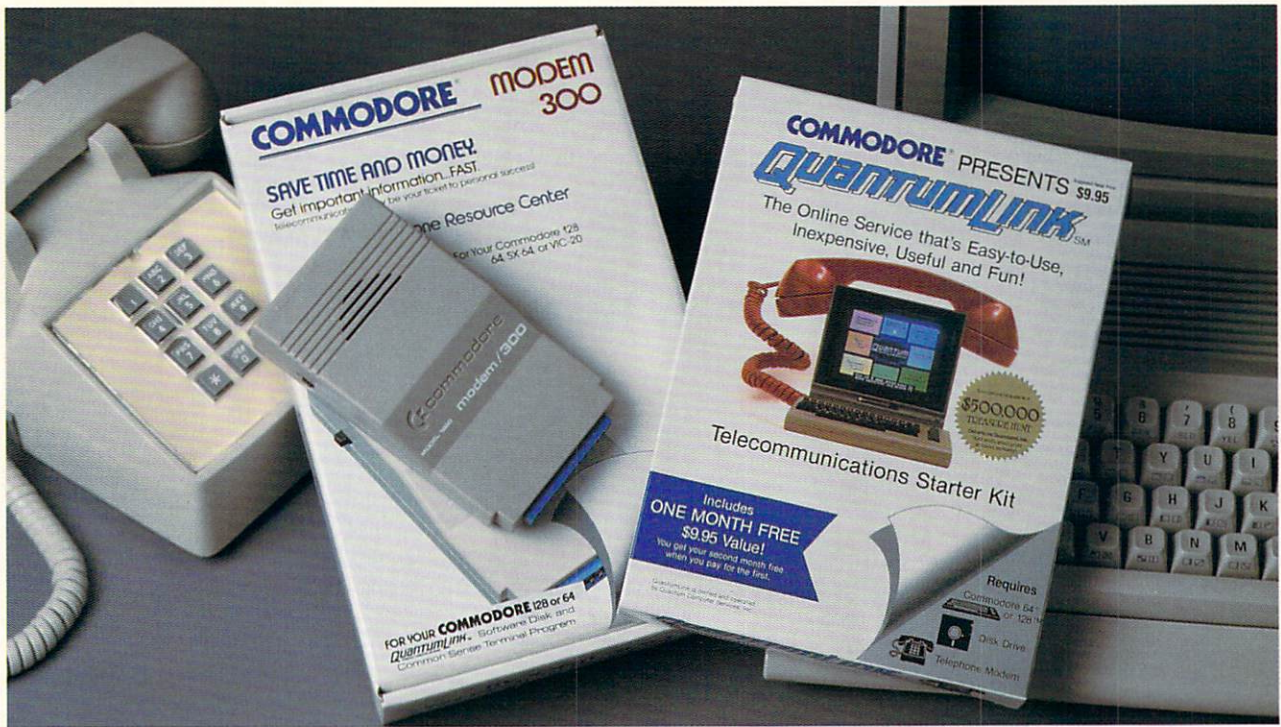
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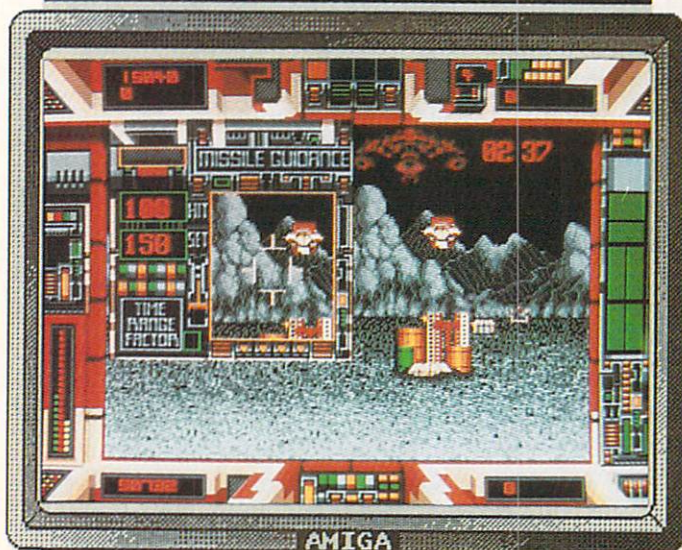
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The Commodore Connection.

THE GALLERY



EAGLES NEST
Mindscape
3444 Dundee Road
Northbrook, IL 61162
(312) 480-7667

INFO-rated



Here's the somewhat unusual case again of an AMIGA game being ported from the 64 (see Gallery, Issue #17). Funny thing is, I like the 64 version better. The AMIGA screen colors have kind of a dingy yellowish cast to them that I, for one, find unpleasant, and I also don't like the way action stops cold every time you pick up an object: very annoying. Other than that, the visual detailing is interesting, as well as the sounds (tho I like the 8-bit sounds better too). Oh yeah, the plot: blast Nazis and collect food, treasure and ammo- stay alive. BD

ARKANOID
Discovery Software
163 Conduit St.
Annapolis, MD 21401
301-268-9877

INFO-rated



The most obsessive, addictive game to come down the bitstream in a long time. Easily the current INFO office favorite (we were lucky to get this issue out at all!). Expertly translated from the popular arcade game, the Amiga version retains all the nuances of the original. More than just "Ultra-Breakout", Arkanoid appeals to every age, sex, and temperament. 32 fascinating (read diabolical) levels will keep you out of trouble for weeks (a sequel is already in the works!). Look for secret game tip elsewhere in this issue! TM

TERRORPODS
Psygnosis c/o CSS
66 Sherman St.
Cambridge MA 02140
(617) 876-2505

INFO-rated



Another fantastic graphics and gadgetry feast from the Cyborgs at Psygnosis! TERRORPODS is the most involved and complicated of their titles to date, with a whole level of trading and resource-management added to the basic move and shoot framework. The involved story-line puts you in the hot seat trying to defend various manufacturing centres from deadly Terrorpods and Spoilers. Three-dimensional scrolling is breathtaking, as well as the nifty auxiliary aerial mapping view and missile guidance window. BD

SHADOWGATE
Mindscape
3444 Dundee Rd.
Northbrook, IL 60062
312-480-7667

INFO-rated



The latest in the string of graphic adventure hits from ICOM (Deja Vu, Uninvited). Simulations uses the same great multi-window player interface as their earlier games. This time the plot is of the D&D fantasy vein, where you, the last of the line of kings, must brave the perils of Castle Shadowgate and confront assorted nasties to save the kingdom. I only wish the manual had been written for the Amiga instead of the Mac. Once again, the involving & intuitive player interface and clever puzzles make SHADOWGATE a sure winner. TM

INSANITY FIGHT
Microdeal
576 S. Telegraph
Pontiac, MI 48053
(313) 334-8729

INFO-rated



From the same folks who did *GOLDRUNNER* (see Gallery, Issue #18) comes another high-speed slick plan-view arcade space shoot-em-up. Tho chosen as the Best Arcade Game of the year by Amiga User International (a British Amiga mag), I feel it lacks the depth to be so highly rated. The graphics and animation are fine (and all the usual arcade sounds are done to bone-throbbing perfection), but there just wasn't enough beyond the dodging and blasting to keep me interested long. BD

KING OF CHICAGO
Mindscape
3444 Dundee Road
Northbrook, IL 61162
(312) 480-7667

INFO-rated



I have mixed feelings about this long-awaited title. An ambitious project, (placing the player in the power-struggles of Capone-era Chicago), 'KING' has a lot going for it. Packed with 2 disks of painting-like graphics screens, and quality sound-track, the game-play is again the weak link. Actions are mostly of the "multiple-choice" variety, and keep things dragging. Some relief can be had by putting the whole deal into a large ramdisk or hard drive, but how many of us can afford that for a game? BD

continued on page 12...



EDITORS' PAGE

Mark



Benn

NEW TOOLS, NEW TOYS, NEW TRICKS:

We're sure regular readers will notice a new look to INFO this time. While the most noticeable changes are attributable to Megan's new toys, **Professional Page** and the **QMS-PS810** Postscript Laser Printer (see reviews on pages 66 & 70), there are a host of other less obvious tools which are helping INFO attain new heights of "professionalism" while we hold to our original philosophy of using only Commodore, Amiga, and compatible consumer products to produce each issue. (Note: this page was done with **City Desk** driving an HP LaserJet II.)

THE MOST USED of these tools is **WordPerfect** which, while anything but perfect, has become our new "house" wordprocessor. This heavy-duty product is somewhat like a roadgrader: unwieldy, but with plenty of power to get the job done.

FOR MAKING QUICK CHANGES to textfiles without having to reboot the whole system, we also need a quick multi-tasking editor which can boot up behind desktop-publishing programs. For those tasks, we're using **TxE**. It's fast, flexible, and easy-to-use, and it is barely bigger than Commodore's own **Ed** editor. We eagerly await the release of **TxE Plus**.

TO SPELLCHECK, none of us has the patience to use **WordPerfect's** built-in spellchecker from disk (tho it isn't too bad if you have enough memory to put it in RAM-Disk). Our current solution (ah, the beauty of Multi-Tasking!) is to use CDA's **LexCheck**. It's fast, even from disk, and we love the user interface. The 100,000 word dictionary is also bigger than **WordPerfect's**.

FOR HEADACHE RELIEF, Mark says the tool that has helped him the most, and really smoothed the transition from C128 to Amiga is ReadySoft's **C64 Emulator**. We know: it's slow, it doesn't run most C64 software very well, etc.

But most of our freelance writers submit their articles on C64 disks, and Mark is using the **64 Emulator** to translate their work into Amiga format. We've found their supplied copy program to be buggy and unreliable, but we get great results running Jim Butterfield's reliable old **Copy-All** program. Then then use a public domain program called **Petrans Plus** that Mark downloaded from PeopleLink to convert the PETASCII text to straight ASCII, and we're set. It's a relatively fast and painless process, but without the **64 Emulator** we would be forced to resort to uploading and downloading files: what a terrifying thought! Thanks, ReadySoft!

IN THE GRAPHICS AREA, we probably couldn't survive without **Butcher** from Eagle Tree, which we use to view and convert IFF and HAM files, and to condition images from **DPaint** and **Digi-View** before pulling them into **Professional Page** and **City Desk**.

THESE ARE BUT A FEW of the current tools and tricks we're using to put this puppy out. By next issue, there will be new ones added and old ones set aside. Space permitting, we will run an occasional "The Making of INFO" column to share them with you.

-Benn & Mark

ABOUT THE COVER

Benn came up with this cover after many long hours of playing **Arkanoid**. Those of you with a similar affliction may recognize it as a giant "Pyradoks". It was constructed with **Sculpt-3D**, and further rendered with **Photon-Paint** and **Digi-Paint**. The logo is our familiar **DPaint** construct with a new **Photon Paint-job**.

ABOUT INFO

INFO Magazine is entirely produced and managed with Commodore & AMIGA computers, third-party peripherals & software, and simple "lay" equipment (standard 35mm cameras etc.)

We use no Macintoshes, no typesetting service, no industrial equipment, (or mirrors!) We do our wordprocessing, illustrating, accounting, mailing labels, data management: EVERYTHING with this stuff! In short- everything you see in these pages you could do yourself at home with easily found products available to the average consumer at a relatively modest cost. We are committed to this approach for several reasons: 1) it's cheap, 2) turn-around times from news to print are incredibly short, 3) we feel that using these products every day in "real-life" is the best basis for reviews and comparisons, 4) it's a blast!

INFO began in 1983 and was originally produced quarterly (sort of) by one person working out of a spare bedroom with one C64, a dot-matrix printer, one disk drive, crude software, and absolutely no publishing experience (see Issues #15 & #16 for the complete lurid history). INFO is now produced bi-monthly by a core group of 5 regular all-purpose computer nerds out of a renovated brewery in beautiful Iowa City, IA.

Our mission is to keep making a living doing what we love best (computing) by giving you hard-hitting reviews you can trust, late-breaking news, informative and fresh articles, and a healthy dose of satire and humor. We don't publish type-in programs that waste your time and money, we don't wear suits, we don't take any guff from advertisers, and we don't take American Express!

What the Ratings Mean:

INFO-rated

★★★★★

★★★★★ Super! Sets the Standard. Tops in its Class!

★★★★ Excellent! Has Extra Features and Good Feel!

★★★ Average. Standard Features, no Bugs, no Extras.

★★ Lacks Features, or is Hard to Use, or has Bugs.

★ Worth the Price of the Disk Alone!

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Thanks.

P.S. If you have a question about software or hardware, that's okay, but please try the manufacturer first!

QuantumLink Mail From: Teach6

Love your mag! Question: What ever happened to the SPARTAN Apple Emulator for the C64? I have one of the things. I'm not so impressed, even though I got a \$100 educators discount. I've tried their 800 number and regular telephone number. No answer. Did they go under or what? Thanks

Perhaps not surprisingly, Mimic Systems seems to have vanished from the face of the Earth. The Spartan was an idea that was just too little, too late. I still think it was one of the most interesting hardware hacks I've ever seen, but absolutely nobody needed one. -Mark & Benn

Dear INFO;

The latest issue of INFO is fantastic! A friend of mine brought your magazine to work this morning and I have not put it down all day! Thank goodness the boss is in a good mood this week. I normally do not write to editors (or goof off all day at work), but today is an exception. I love your magazine and look forward to receiving my very own first issue (my friend wants his back--NOW!)
Dobi Bullock, Las Vegas NV

And our thanks to you, Dobi, for providing this issue's obligatory "INFO Is Great" letter! Mark & Benn

more reader mail on page 18. ...

COIL COP

Epyx
600 Galveston Drive
Redwood City, CA 94063
(415) 366-0606

INFO-rated



From Epyx's Maxx Out series, this is a weird game with a weird name! The character you control (Coil Cop) is one of those classic whimsical entities who travels in a strange land of conveyor belts, winged eggs, turbo-bubble updrafts, slides, and mutant toys (kind of a surrealistic *Chutes & Ladders*). Plenty of action and challenge without being violent! Delightful smooth-scrolling graphics and sounds really stand out. Nicely done (especially when you consider that this is supposed to be Epyx's "economy" label)! BD

THE THREE STOOGES

Cinemaware
4165 Thousand Oaks Blvd.
Westlake Village CA 91362
805-495-6515

INFO-rated

PREVIEW

Ooooooh! Wise guy, huh? Take that! Nyuk, nyuk, nyuk! The folks at Cinemaware have outdone themselves with *The Three Stooges*. Standard-setting graphics are coupled with perfectly digitized Stoooge sounds to make an uproarious comedy game that will make even non-Stoooge fans laugh out loud. Moe, Larry, and Curly set out to save an orphanage by raising money in a series of arcade-type sequences, including a wheelchair race, slap and poke contest, and the inevitable pie fight. We can't wait! TM

SOKO-BAN

Spectrum Holobyte
2061 Challenger Dr.
Alameda CA 94501
415-522-3584

INFO-rated



If you like the old "Sliding 15" puzzle and pencil-and-paper mazes, you'll love Soko-Ban. In this game you operate a warehouse robot, sliding crates into place in 50 different mazes. The program is plagued with "Apple conversionitis" (mediocre color and sound), and master logic that doesn't recognize when you have made a maze insoluble, and an UNDO function that only undoes a single move. Frustration level is probably too high for younger kids, but I found myself caught up in playing "just one more time". MB

Q-BALL

Mindscape
3444 Dundee Rd.
Northbrook, IL 60062
312-480-7667

INFO-rated



The idea of three-dimensional billiards inside a cube sounds promising, but this game just falls flat. The keyboard-only interface is just too clumsy, and it's really difficult to visualize where things are supposed to be in space (the way it is represented) and even harder to get a sense of where you are aiming and likely to go. A true 3D version (with glasses or something) would probably be more effective. Interesting as a concept and screen hack, but not playable enough to be a sold for money. TM

STEALTH FIGHTER

MicroProse
120 Lakefront Drive
Hunt Valley, MD 21030
(301) 667-1151

INFO-rated



Latest in the continuing list of technically excellent state-of-the-art warfare simulators. This time your lethal weapon is the top-secret Stealth F-19 COSIR. Microprose has packed a lot into this title, and continues to squeeze almost unbelievable performance out of the C64: fast, smooth-scrolling animation, on-screen heads-up display, detailed instrumentation and mapping display, and a frightening arsenal of bombs, missiles, rockets, and cannon. Mission scenarios include North Africa, Persian Gulf, & Eastern Europe. BD

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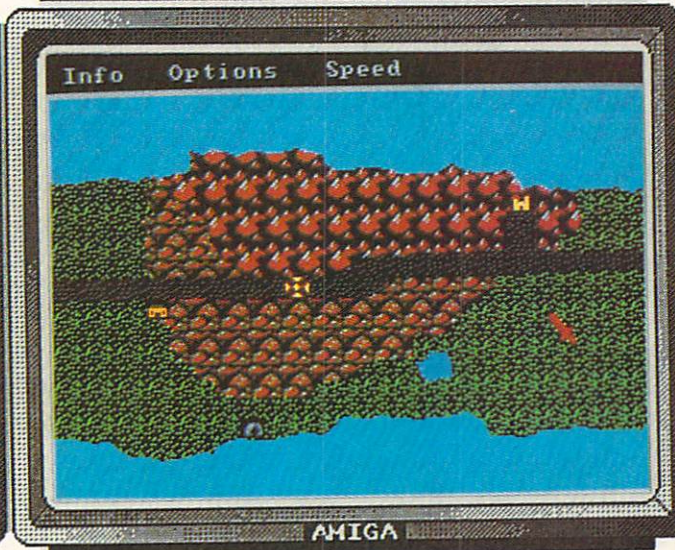
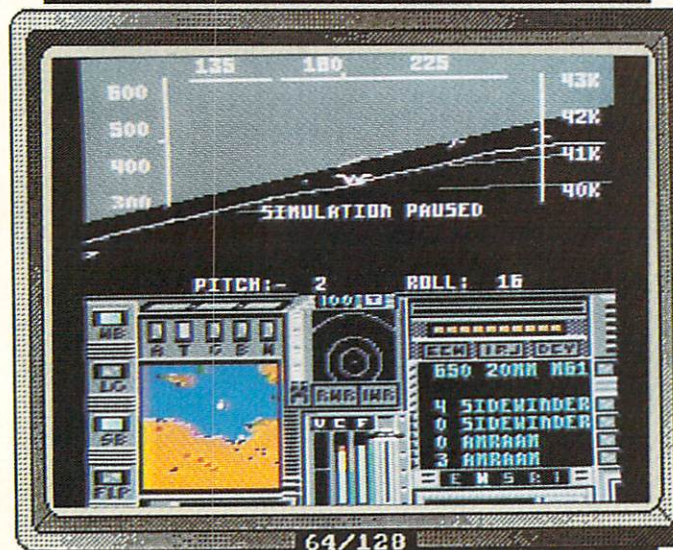
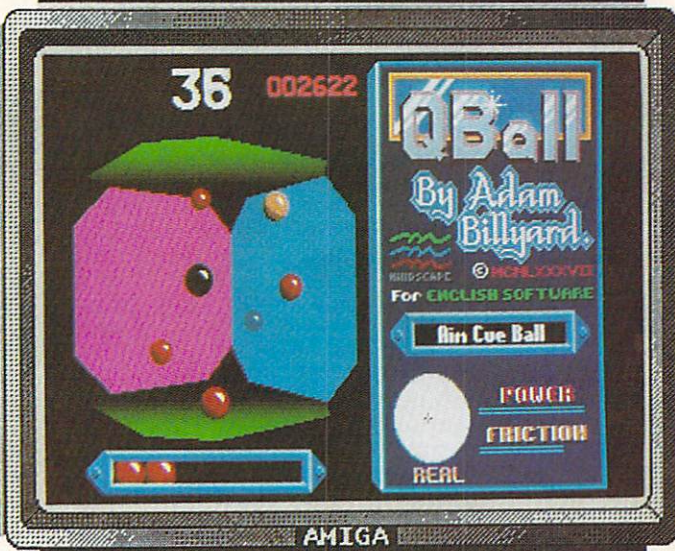
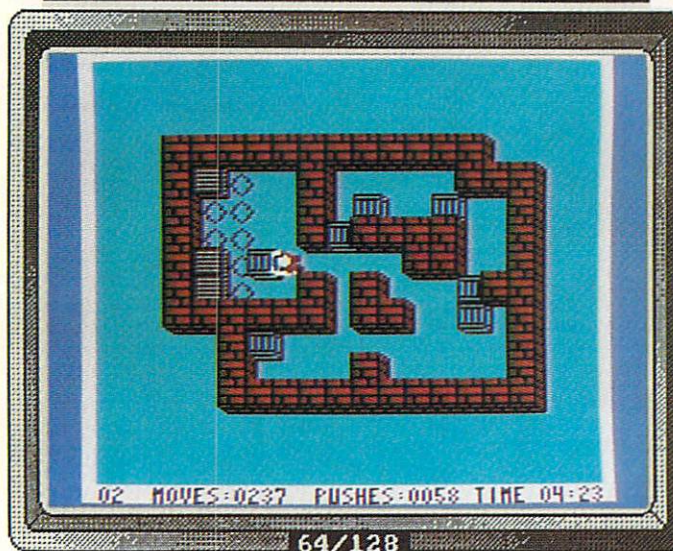
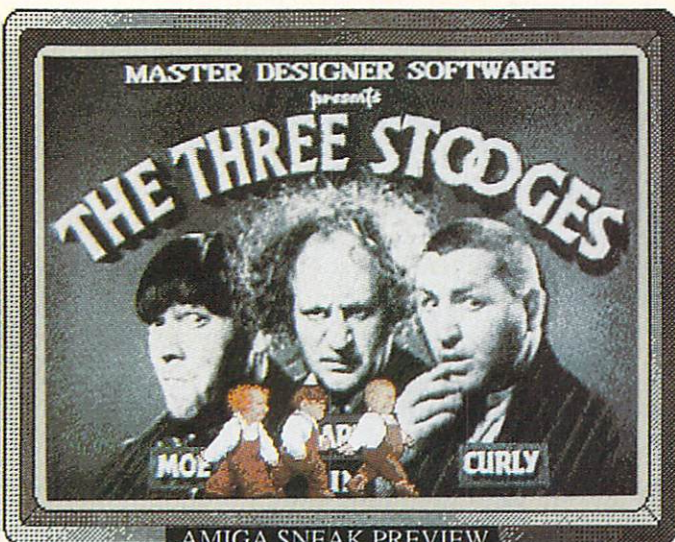
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(415) 964-1353

INFO-rated



Familiar multiple-player role-playing game. Command a band of from one to six characters looking for the Nine Rings. Mazes, spells, dungeons, puzzles abound. All the usual crowd is here: orcs, elves, gnomes, wizards, thieves, etc. For hard-core board-gamers, there is plenty of complexity to be had in the included manual. Otherwise, pretty usual stuff, but made more pleasing to the senses with Amiga color and mouse control. BD

THE GALLERY



DEJA VU
Mindscape
3444 Dundee Road
Northbrook, IL 60062
312-480-7667

INFO-rated



Almost entirely point-and-click, playing Deja Vu is simple to learn and atmospheric to explore. You awake from being "mickey finned" in a seedy bar, with no memory at all and must find out who you are in time to save yourself from imminent arrest for murder. This is an impressive "port" from the Amiga (you can even open multiple windows and drag objects around), stretching the 64 programming "envelope" to a new height. The attention to detail and ease of play make this a new standard for the genre. TM

DEMON STALKERS
Electronic Arts
1820 Gateway Drive
San Mateo, CA 94404
(415) 571-7171

INFO-rated



Arcade denizens will recognize this two-player game at once as Atari's arcade hit GAUNTLET with a different name. Actually, DEMON STALKERS looks and feels more like the arcade version of GAUNTLET than the 64 version of GAUNTLET does (see Gallery #17)! Use your crossbow to ward off rats & ghosts while you pick up keys, treasure, & magic. If you get thru the built-in 99 levels (!) you can use the included construction set to create an endless number of custom dungeons! BD

MINI GOLF
Capcom
1283-C Old Mt. View/Alviso Rd.
Sunnyvale CA 94089
800-843-4632

INFO-rated



This is another conversion from the coin-op video arcades. It is faithful to the original and a whole bunch of fun for all ages (this is one of those rare games my 3 yr. old and I like to play together!) 18 holes of fantastic (sometimes maddening) miniature golf with great obstacles (like the intermittent electric fence, and whirlpool trap). The shaded graphics give a real sense of depth, and make maximum use of the 64's 16 colors. The combination of clever course design and a very easy to use joystick control interface make this game a real treat! BD

APOLLO 18
Accolade
20813 Stevens Creek Blvd.
Cupertino CA 85014
408-446-5757

INFO-rated



This excellent simulation of the 18th Apollo moon mission features great graphics & sounds (including digitized speech!), and demanding depth-of-play. Various joystick interfaces are employed for different scenarios. The launch sequence is fairly demanding (like the real thing!) and it may require several attempts to get the mission off the ground. As an educational program, Apollo 18 excels. It involves you in every detail of the mission from pre-flight tests to splashdown--a sure bet for would-be astronauts! MB

CARD SHARKS
Accolade
20813 Stevens Creek Blvd.
Cupertino, CA 95014
(408) 446-5757

INFO-rated



CARD SHARKS is a card-players delight! Take on any of six interesting opponents (including the three pictured heads of state!) and play your choice of hearts (I think this is the first commercial hearts simulation for the 64), black jack, or three flavors of poker (7 stud, hold-'em, and 5 card draw). The simulations are very well done (for instance, best poker hands for each player are highlighted). Add to that the extra dimension of talkative on-screen companions, and you have one of the best card-game simulations available. BD

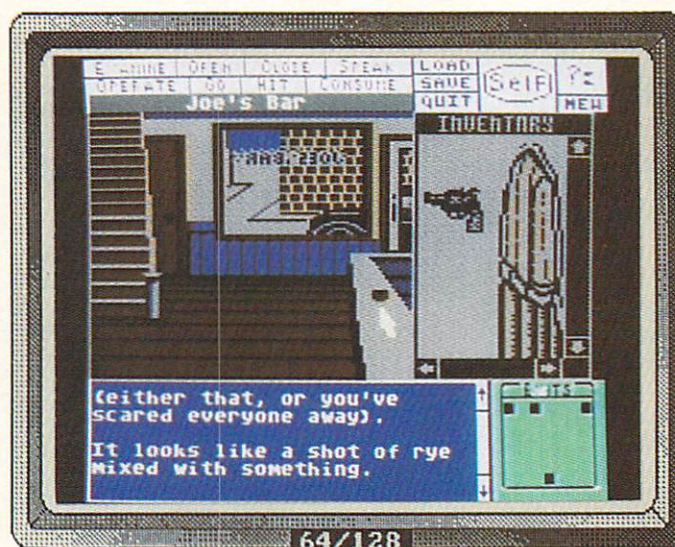
BLACK JACK ACADEMY
MicroIllusions
17408 Chatsworth St.
Granada Hills, CA 91344
(818) 360-3715

INFO-rated

PREVIEW

MicroIllusions has done another nice job of porting a great Amiga title to the C64. To keep the original 5-player setup capability, the programmers have incorporated an unusual fast horizontal scrolling screen to quickly show either left or right hands in play. All the great setup options are intact, and a good job has also been done duplicating the sounds of shuffling cards and chinking chips that add so much to a game of this sort. I especially appreciate the large, readable card faces, and the variable play-speed. BD

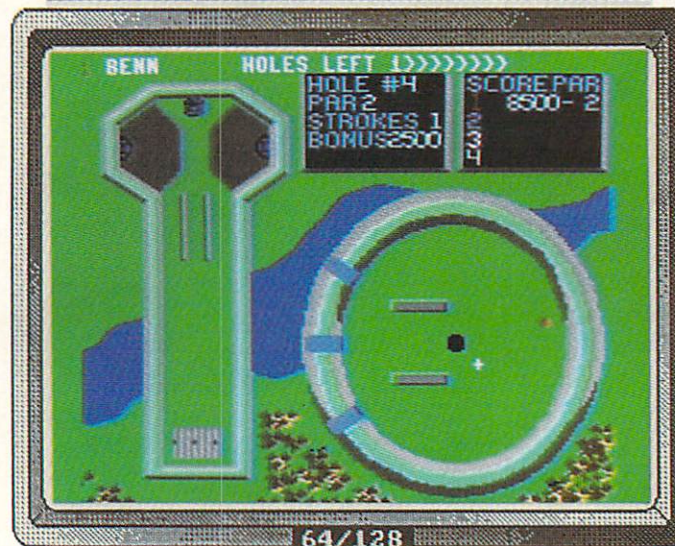
THE GALLERY



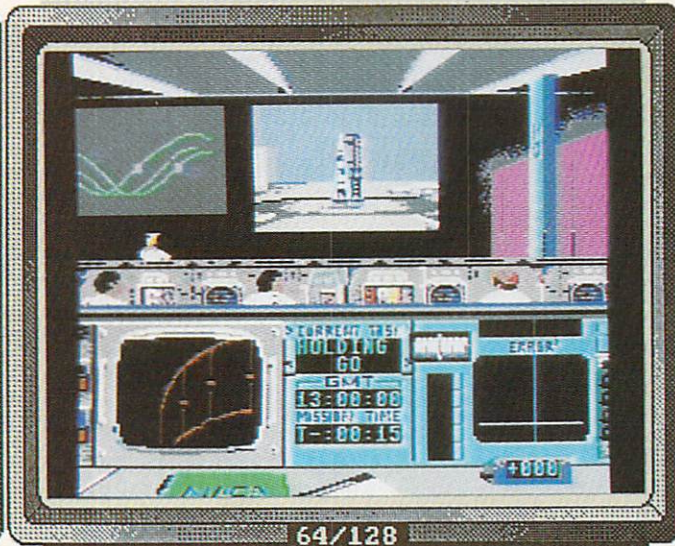
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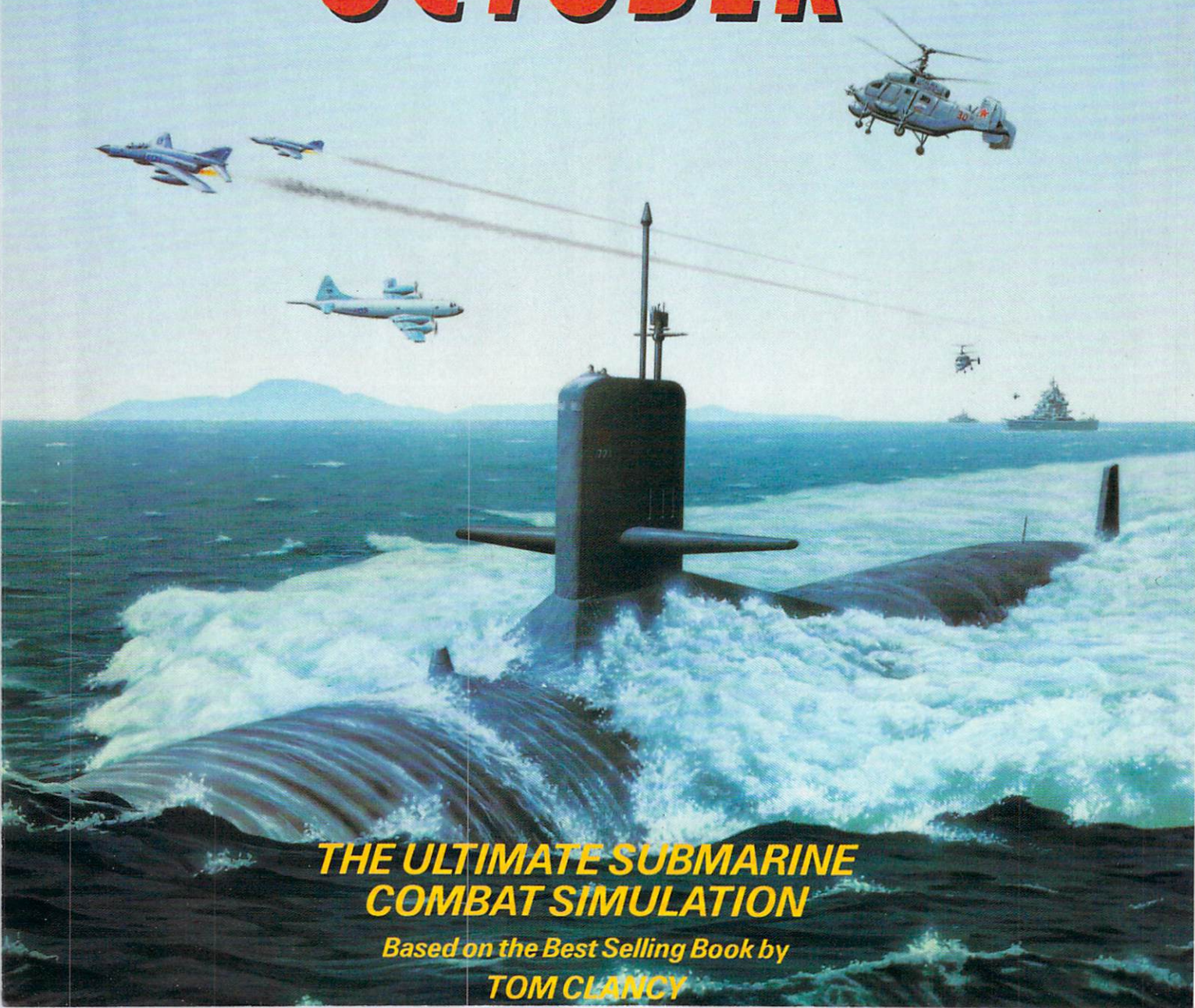
64/128



64 SNEAK PREVIEW

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40 COLUMNS

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- All routines are Machine Language and operate with SYS commands, NOT a wedge to the BASIC interpreter.
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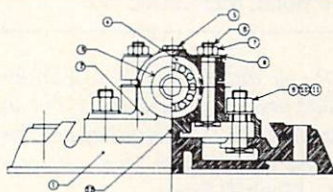
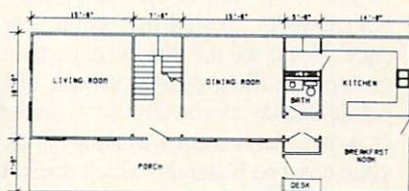
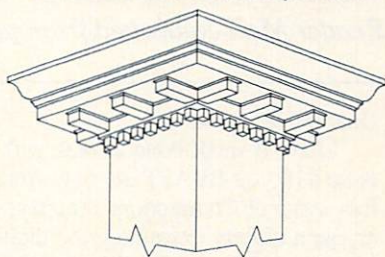
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Home Designer is a sophisticated CAD package that allows you to create extremely detailed and accurate drawings and to print your drawings at virtually any scale, with resolution approaching a plotter. With its accurate scaling, powerful command set, 5 different layers and full support of library figures it is perfect for developing professional quality house plans, mechanical drawings, schematics, engineering applications, model airplane plans, and more.

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...Reader Mail continued from page 11

Dear INFO;

I have a small bone to pick with you. On page 8 of issue #18 you BLAST the new Amiga logo as a senseless waste of Commodore's money, which it is. However, upon closely examining the digitized photos of both of you on the top of the same page, I noticed that you both proudly sported that same new logo on baseball caps! Please tell me that the caps are now collecting dust on top of a filing cabinet in your office, and are not on public display as you strut from table to table at computer shows. Anyway, it was amusing to see you contradict yourselves so blatantly, which doesn't happen too often. Bob Bond, Manitowoc WI.

Bob, we did a lot of soul-searching before we decided to go ahead and wear those caps. The thing that finally made up our minds for us was that they are the first things Commodore has given us in years, and we weren't about to turn them down! -Mark & Benn

Dear INFO;

First off let me congratulate you on a magazine well done. The reviews, the layout, color, and caring attitude all add up to a great magazine. However, nothing is perfect, and I feel I must address my one area of concern: your attitude and treatment of Atari and even IBM and Apple. For example, in the Rumor Mill in issue #18 you state that Atari ST sales in the U.S. are dying on their feet, that Mega STs have had poor sales and that developers are bailing out. Why not state your source? I have read just the opposite. Who do I believe? What about your complete lack of reporting the facts in your COMDEX report? No mention of the relative groundbreaking transputers used in ABAQ, or that it will interface with the Mega STs. No mention of the ultra hi-res modes nor the 16+ million colors. I saw nothing about the CD-ROM that is finally available (or will be shortly), or the Unix-like operating system Idris. The fact that all these facts were not even mentioned nor even hinted at indicates a certain attempt at convincing the reader to not even consider the ST or any other computer for that matter. If you are going to cover Atari at shows, do so in a fair and just way. I realize that this letter (in its entirety or even partially) will not be published. I realize that you rarely print any letters that criticize you. But let it be known that I have raised an objection and I hope you consider my position objectively, as I'm sure you most sincerely will. Keep up the good work (most of it). Marc-Andre Pigeon, Blind-River Ontario, Canada.

We appreciate your concern, Marc. You're right. In that Rumor Mill column, we said that ST sales "appear flat", and stated that developers are "bailing out", both of which are true. We've heard from many developers that ST software sales are very disappointing, and they are pulling back from developing for that machine. Others tell us that they will continue to release titles for the ST as long as they can still recoup their relatively low translation costs, though they have quit developing new original games for the ST market. Perhaps the most telling fact of all is that Atari themselves will not make a statement on ST sales, though they are very happily reporting their quarterly profits (based mostly, we speculate, on videogame machine sales). As for the ABAQ, we did say that it was using Mega STs as terminals, and that it was transputer-based. The other things we said about its vapor status still stand. We don't like Atari. We don't like the company or its management. We're not real crazy about Apple or IBM, either. We think Commodore makes better computers, and we won't apologize for taking that stance. Mark & Benn

QuantumLink Mail From: Tim7

I know you probably get asked this question a lot: Which computer should I get? My friends and I have been arguing over which computer I should buy with about \$800 I'm receiving soon. I presently own a C64 and am very pleased with it (it does fine for all of my wordprocessing needs, etc.) My problem is that I feel like I don't have a "real" computer. I am a graduate sociology student and would like to have a computer that can do big-time number-crunching and wordprocessing. Well, it seems a PC-compatible should be my best choice (they are affordable and have the most "serious" software). But I WANT an Amiga!!!! I also have been considering a C128D, just so I can keep on enjoying the Commodore 8-bit machines (games, GEOS, etc.) But my friends say the 128 is a waste of my money. So, what is your omnipotent opinion?

If it'll make you feel any better, a comparison in BYTE magazine last year showed that the C128 stacks up very well against an IBM/PC in all aspects except disk access speed. BASIC operations, spreadsheet recalculation speeds, etc., were all very close to the PC. If you have a great need to keep on using your current C64 software, a C128D would be a good choice for you. The C128D looks more like a PC than the 128 did, and might not raise any eyebrows among your snobbish IBM/PC "friends". But taking into account your status as a sociology grad student, I'd be inclined to advise that you go ahead and purchase the Amiga. You can do some great number-crunching (not to mention charting and graphing, etc.) on an Amiga, and you can now find software that is as good as or better than anything on the PC for just a bout every application you can think of. Good luck! Mark & Benn

more reader mail on page 22. ...

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Function	Normal DOS	RapiDOS	RapiDOS Pro	Your System
Load 202 blocks	128 sec.	15 sec.	3 sec.	
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RapiDOS requires a socketed kernal ROM U4, and is available in versions for the 64c, 128 in 64 mode, and 1541c (please specify when ordering). RapiDOS is easily upgradeable to the Professional Version. RapiDOS Professional drive controller is (c) '87 mts data GbR, the creators of the best European parallel systems.

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INFO's Guide to the Best From the Rest

Here's what you've been missing in the other magazines the past couple of months:

Ahoy!

The big news at Ahoy! is that they are undergoing meiosis. It's splitting into two editions, one for the 64/128 and the other for Amiga. The issues will alternate, more or less, with four Amiga issues and eight 8-bit issues each year. Subscribers will automatically be relegated to receiving only the eight-bit volumes, but can opt for Amiga-only issues or both. The preliminary poop on the first AmigaUser, as it is to be called, indicates that Mort Kevelson will delve into sound, Arnie Katz will look at a bunch of games, and Richard Herring will offer the first installment of a column on using the CLI. It goes on sale April 5. Meanwhile, in the Jan. Ahoy!, Mort the K continues his look at the expansion port, Arnie Katz and cohorts pick their favorite Amiga games from '87, and Dale Rupert gets into the fascinating area of mathematical imagery. In the Feb. issue, Mort takes a good look at the two C64 emulators for the Amiga, and Dale examines sound; this issue also has a massive type-in adventure game called *Crypt of Fear* by Cleve Blakemore that is in easy-to-learn-from BASIC, as well as an article with some nice BASIC screen programming tips.

RUN

The Jan. issue announces the departure of Jim Strasma, whose *Commodore Clinic* has been a fixture since Jim left *The Midnite Software Gazette*. Lou Wallace is taking over the column. Margaret Morabito's *Resource Center* educational column is also gone. Tim Walsh, RUN's tech editor, is assuming command of the *Magic* column. There is a long, long hex-in-data-statements terminal program that looks to be enough to give even the hardest typist screaming nightmares. The Feb. issue

has the RUN 1987 index and a kind of general overview of simulations software, as well as a look at financial analysis programs.

COMPUTE!'S GAZETTE

The Jan. Gazette has (surprise! surprise!) a *SpeedScript* enhancement. So does February. Also included in Jan. is a hex listing for a needlework chart-maker that just doesn't handle big enough areas to be useful. Jim Butterfield kicks off his ML column with a clear explanation of just what the heck ML is. It's good reading. The Feb. issue contains a guide to graphics packages, presented without opinions. There's also a piece by Tom Netsel on actually using them in the real world.

The latest in the series of questionable Gazette subscription deals is a "Special 1988 Issue" with "33 of the all-time best from *Compute!* and *Gazette*". Subscribers automatically received this issue, which is just a reprint of type-in stuff that subscribers already have! And, of course, it counts against your subscription. If you call 1-800-247-5470 and complain loudly enough, they will credit your subscription. What will their marketing wizards think up next? (See INFO's editorial in issue #15 for more of the *Compute!* story.)

COMPUTE!

The feature on monitors in the January *Compute!* never even mentions a brand name. There's an interesting interview with Joel Berez & Marc Blank of Infocom in which they discuss the future of adventure gaming. Sheldon Leemon talks about the legal and ethical considerations of converting commercial games like *Monopoly* to computer format—good reading on a topic that needs to be explored. The type-ins are the usual repeats.

Compute!'s Commodore Buyer's Guide hit the shelves in mid-January. For \$3.95, it listed 1064 C64 and C128 products. Not a bad job for a first-time effort, but we have a few complaints (natch!): 64 and 128 products were mixed together in the same listings,

which made things hard to sort out; there were (of course) no product ratings; they only covered products from about 150 companies; and the whole works was printed on cheap paper. Still, the software listings seemed to be fairly up-to-date. The hardware listings, on the other hand, were woefully incomplete: they listed only printers that are serial-port compatible, listed no printer interfaces at all, printed no specs for any of the disk drives listed, simply reprinted their "Modem Buyers Guide" two-page chart from an earlier issue, and didn't list any monitors.

commodore

Commodore magazine offers its choices for the *Best of '87* in the December issue. There's also a long overdue article about the programmers behind the software we all know and love. Many of us use their work daily and don't even know who they are. We are properly ashamed of ourselves and promise to learn their names. January sports a new logo. Is there some kind of logo-changing madness going around in West Chester? The reviews are pretty much old news, and as uncritical as ever, but they have been divided up into machine-specific sections. There's a feature on Infocom that's must-reading for adventure addicts. [Wait a minute, there's a definite feeling of *deja vu* here. Oh, yeah! Look up there at *Compute!* Still, it's a good read.] If you're into Amiga graphics (and who isn't?), check out the SIGGRAPH report. Part 6 of John Iovine's series on the User Port details building your own digital camera. Our "Dubious Title of the Bi-Month Award" goes to the type-in game '*Castrovia*'. We don't want to know any details; it sounds far too painful. The February issue lists 101 game tips from Commodore Magazine readers, and an amusing look at gamers' "fan mail" (I love the Scott Adams story!) There's part 6 of John Iovine's series on the User Port, and another excellent Amiga Public Domain column by Graham Kinsey.



AW jumps on the desktop publishing bandwagon in their January issue, but they only devote three paragraphs to the top three Amiga DP packages. A Sheldon Leemon feature covers the new 3-D graphics programs, and David McClellan offers his choices for the best PD stuff of '87. There's also a fascinating piece on how the medical school at UCLA is using Amigas in brain surgery. (Don't worry - it's not a do-it-yourself how-to.) AW must be pretty sure they have an unbreakable armlock on the advertising market—they're starting to publish some unflinchingly honest reviews, like the one of Aegis' *Arazok's Tomb* and the long, hard look at C64 emulators in the Feb. issue.

The Amiga™ Sentry

The December issue arrived in our offices right after Christmas. It's chock-full-'o-reviews, mostly short, mostly uncritical, though a few disparaging words creep in now and then. If you've been hibernating under a rock for the past few months and somehow missed seeing the BADGE demos, at least you can read about them here, and see screen shots from the winner, Joel Hagen's *RGB Hazard*.

Amazing Computing™

Vol. 2, #12 of *Amazing* sports one of the worst covers we've seen to date on any magazine anywhere: it features three videocassettes with the brand names sloppily whited out by hand. This from a publication that has access to the Amiga (and, presumably, Amiga graphics) every day? The main thrust of the issue is Desktop Video, with the first of a series by Larry White on the hottest topic in Amigadom. Among other things, there are reviews of *Cal-*

igrapher, *Animator: Apprentice*, *Dynamic Drums*, and a total of ten pages on *WordPerfect*. Also included is part one of an article on *Life* - the computer variety that Mark is so enamored of. V3, #1 of *Amazing* focuses on financial applications, and includes a lo-o-ng type-in AmigaBASIC spreadsheet program. There's also an interview with Commodore's technical whiz, Dave Haynie.

COMPUTER SHOPPER

Stan Veit and CS named the Amiga 500 the *Computer Buy Of The Year* and displayed it prominently on the cover of the Dec. issue. Congratulations, Commodore/Amiga, and good show, *Computer Shopper*! The January '88 520-page monster offers an interesting piece on desktop video detailing what we already knew: what the other machines can only aspire to, the Amiga already does. The Shopper deserves kudos as one of the few multi-machine publications not to turn over their pages 100% to MS-DOS and Macintosh coverage. There's always a respectable dozen or better Commodore and Amiga articles in its pages.

Twin Cities 128

All of you who have been having problems getting *Fast Hack'em* to work with the new 1571 ROMs will want to check out Frank Prindle's patch in issue #18. There's also useful stuff on *Superbase*, *BASIC 8*, and *128 ML*, as well as instructions on how to add DIP switches to your 128D.

OTHER MAGAZINES

V8, #5 is the last "combined" issue of the *Transactor*. It features an article on decoding Infocom's game commands, a look at binary trees, and good editorial by Karl on how he feels about pirate BBSs.

Issue #20/21 of *COMAL Today* is

a "flippy": the issue #20 cover is on the front, and you flip the magazine over for the cover of issue #21. It's like the old Ace Double paperbacks. The issue #21 side is not called *COMAL Today*, but *Yesterday Today*. It's a nostalgic look back at the first 20 issues, with many great reprints. The sad news is that there are financial difficulties at *COMAL Today*; Len has had to let go of his staff, so it's back to a one-man operation, and they are now only taking single-year subscriptions.

Byte is still barely mentioning the Amiga, so we're still barely mentioning Byte.

The latest *GEOWorld* has an open letter from editor Skip Goetzinger addressing some of the complaints about Berkeley Softworks customer support (and lack thereof) that raises some salient points about what a software manufacturer's responsibilities to its customers are, and what they aren't. Read it before you complain about Berkeley.

One of our recent re-discoveries is *Science News*. It's a weekly covering the cutting edge of the scientific community. They were among the first to report on the recent breakthrough in superconductors. (\$34.50 a year from Science News, 231 West Center St., Marion, OH 43305.)

Infoworld's December 28 issue does some mauling over industry happenings in '87. Apart from the particularly offensive application of the term *glasnost* to IBM, and comparing IBM to the Soviet Union, the remainder is, as Bill the Cat would describe it, *ack phfffft*.

MAGAZINES ON DISK

The January *Jumpdisk* contains a virus article as well as the virus checker program. In the so-old-it's-new category, *Amoeba Invaders* will bring back some fond memories of its prototype *Space Invaders*. There's plenty of interesting reading as well.





The Real World

INFO's Real World column is an ongoing attempt to bring you news flashes, insights, and information from that world inhabited by humans who don't own computers--the Real World.

MORE CYBERPUNK

Ever since we first mentioned William Gibson and cyberpunk science fiction (*the Real World*, INFO #16), we've had a zillion requests for more titles in this "growing body of science fiction", as we called it.

Our readers have, once again, come to the rescue with the following suggestions:

Neuromancer, *Count Zero*, and *Burning Chrome* by William Gibson, of course.

Mindplayers by Pat Cadigan

Eclipse, part 1 of a trilogy by John Shirley

Blood Music, *Eon*, *Beyond Heaven's River*, *Hegira*, *Psychlone*, *The Wind From A Burning Woman*, and *Strength of Stones* by Greg Bear

Software (and soon, *Wetware*), *Spacetime Donuts*, *White Light*, *Masters of Space & Time*, *The Secret of Life*, and *The 5th Franz Kafka* by Rudy Rucker

Schismatrix and *The Artificial Kid* by Bruce Sterling

The Peace War, *Marooned in Realtime*, and *True Names* by Vernor Vinge

When Gravity Fails, by George Alec Effinger

We haven't had a chance to check out all of these yet, of course, but we're sure looking forward to it! By the way, some readers have even included older works like Philip K. Dick's *Do Androids Dream of Electric Sheep?* (upon which the movie *Blade Runner* was based) in the "Cyberpunk" category, so you might want to check out some of the "classics", too. Thanks to Richard Herring, Michael Staunonlin, Kris Gilbert, and many others who answered our call for more titles!

EDMUND SCIENTIFIC

The Edmund catalog is full of wonderful things. It's the only place I know of where an ordinary citizen can plunk down his money (or major credit card) and walk away with a Van De Graff generator. They also sell lasers (all kinds, from powerful holography lasers to a battery-operated pocket-sized model), science model kits (dinosaur skeletons and such), and a \$3200 camera-adaptable StarLight scope. Edmund is the first commercial vendor that I know of to deliver to the public a workable experimenter's kit based on the new liquid-nitrogen-temperature superconducting materials. Their superconductive disk, which is capable of levitating a rare-earth magnet, is only \$20 with instructions.

If you're a science teacher, or are just a gadget freak like we are at INFO, you'll love the stuff Edmund Scientific sells. Their full-color, 150-page catalog carries a \$5 price tag, but they sent us one free for just a phone call. 609-573-6250, or write Edmund Scientific, 101 E. Gloucester Pike, Barrington NJ 08007.



Reader Mail

...Reader Mail continued from page 18

QuantumLink Mail From: Jer Jer

I am a busy computer teacher and I rely on your magazine to keep me informed in the face of a mountain of monthly publications that I receive. Do you think Commodore's new intention of seizing the education market is real? I just talked my school (K-8) into buying 18 C-64c's connected to 3 C-Scan interfaces (VIC-Switches are unavailable as far as I know). The system has dynamite potential over the four Apple II's they replace. My proposal was overwhelmingly received. When will Commodore realize the potential of this market? Based simply on numbers, there is no equal. And for ease of use in a multi-unit lab setup, even better!. File server capability for less than \$200? Whoa! I've been using C-64's since they debuted, upgraded to 128, and I still recommend them to parents over Apple. The Commodore Logo language, the best I've seen, is almost impossible to locate. The story is the same for others in the Commodore software line. What can be done, and what will Commodore do? Perhaps an influential editorial in your stellar mag could shake them up to the most amazing potential market there is. (I'm still picturing Amiga 500's in every classroom by 1992!) Potential market: the L.A. Archdiocese oversees hundreds of schools and is STILL trying to organize its computer curriculum, and that's only one private district. Keep up the honest work!

We've always thought it was a shame to saddle a classroom full of kids with just 4 or 5 Apple computers when the same money would buy a C64 for each and every one of them! It's a waste of the taxpayers' money, and it shortchanges the kids and the teachers. We don't know why Commodore hasn't put forth more effort in capturing education, because their products are a natural for that very large, very influential market. Everyone at Commodore HQ in West Chester reads INFO, and we can only hope that your letter will catch someone's eye and get the ball rolling. Thanks for writing. -Mark & Benn

QuantumLink Mail From: DaleB18

I continue to be amazed at how much of what I read in INFO is information I find no where else. For instance, it was in INFO that I read about the going price of used SX-64s. I sold mine on Q-Link because of this information, and am now typing on my new 64-C with memory expander, which was purchased with the money from the sale of the SX. Thanks!

Glad to be of help! By the way, I'm sure it's just an oversight, but you forgot to remit our 25% commission on that sale. A cashier's check is fine; just mail it to the INFO Reader Mail address. You can make it out to "Mark Brown". Oh, and Benn doesn't need to know about this.... Mark



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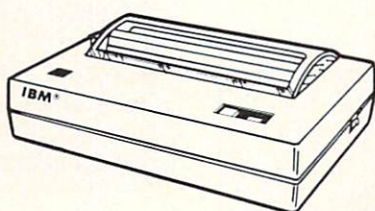
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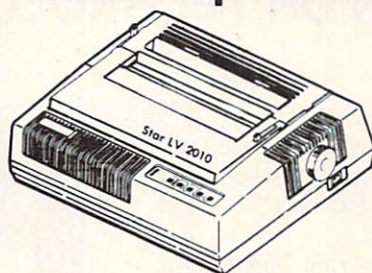
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Midnite Software Gazette

by James Oldfield Jr.

CASHING IN ON TECHNOLOGY Part II

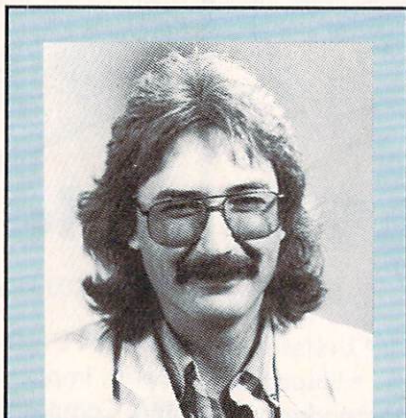
The second in a continuing series of articles addressing the important question: "How can I make a fortune in the computer software business?"

I'd like to begin by saying "thank you" for all the EMail and letters I have received on the first article in this series. I received many more suggestions than I can possibly address in a series of magazine articles, but I'll cover as many aspects of the software business as I can.

THE LEGAL NICETIES

There are a few critical legal aspects of 'doing it on your own', and many questions that need answering before you begin producing a product for monetary gain. State and federal papers need to be filled out for incorporating your business; accounting and tax services need to be lined up; you've got to investigate copyrighting your products, company logo, and trademarks; you need to work out programmers' royalty contracts (if necessary); and you'll have to consider the implications of product warranties (whether implied or not--in many states, they're required by law). Needless to say, there do seem to be a lot of formidable obstacles. But they're not insurmountable.

I would *highly* recommend consulting a lawyer for help in filing the right papers and finding the right people to help you handle the mundane but critical fine points of running your own business. More likely than not, your family lawyer can help you (for a fee, of course!) If you anticipate a lot of legal work, you might ask your family lawyer to recommend a business lawyer. If you don't have a lawyer, most states have a state bar association which can help you locate one.



James Oldfield Jr. is Vice-President of Micro-Pace Computers, Inc., The Director of The Midnite Press, a consultant for Constellation Software, and a Commodore Guru, first class. You can reach him on QuantumLink as Midnite.

The U.S. government is more than happy to help you find out about copyrights, for free. Write to: Library of Congress, James Madison Building, Room 403, Washington DC, 20540.

You may also want an ISBN (International Standard Book Number) which are issued for microcomputer software products as well as books. For more information, write to: R.R. Bowker Co., Dept.E-62, 245 W. 17th Street, NY, NY, 10011.

A simple but useful product that has helped me in generating forms and contracts is **MicroLawyer** from Progressive Peripherals and Software. Numerous forms are included in SEquential file format for your word-processor, and even if you don't use the forms verbatim, they can help give you ideas that will get you started. Their address is: 464 Kalamath Street, Denver, CO., 80204. Remember,

The opinions expressed in this column are those of the author, and do not necessarily represent those of INFO Publications, Inc., our staff, our lawyers, or any other living human being.

MicroLawyer isn't meant to replace a lawyer, but it's an excellent resource for getting things rolling.

One of the major stumbling blocks when acquiring software or hardware from outside sources is negotiating with writers and programmers for the rights to publish their products. But it doesn't have to be a problem, if you and the other person follow one basic rule: *Use Common Sense!* All too often, greed and power creep into negotiations and create problems. Use common sense and be fair to each other, and negotiations will go without a hitch.

PACKAGING

As I mentioned at the end of Part One, packaging is as critical to your success as the program's quality and marketability.

Instruction manuals and documentation play an important role in your package design. You may need to invest in a box big enough for a thick manual, or you may be able to get by with a much smaller (and cheaper) box and a one- to eight- page folder. Either way, keep in mind all the materials that need to fit into the box. Size and weight (when it comes to shipping costs and weight limits) need to be considered, as well as the time involved in stuffing everything into the package.

If there's more than one person involved in your operation, you'll want to set up a "production line" to put everything together. In the beginning you may not want to pay for a shrink-wrapping machine (which automatically shrinks a protective plastic film



around your package), although there are some smaller units available now that use a small board and cutter and allow you to use a hair dryer to shrink the plastic. The plastic protects the box while in transit and serves as a kind of "security seal" at the store to show that the package hasn't been tampered with.

The package design must reflect the program's intent. Whether a game or application, pictures *do* say a thousand words. On the cover of the box or folder you need to lay out a design that is both pleasing to the eye and not too cluttered with activity. And you don't always need a professional ad agency to do the artwork: I've worked with many free-freelancers and undergraduate students on package designs with very good results. They're much less expensive, and will often do work that is just as "professional" as an agency.

On the back of your package, include a few screen shots of the program actually running (make sure you specify which computer it's running on, too). It will help the dealer as well as your potential customer. Four color displays on the front and back are great, but I've seen less expensive black and white and two-color designs that worked well, too. Many of you may recall that the *Midnite Software Gazette* had a black and white cover for nearly all of its existence. Though we were sometimes criticised for not having a flashy four-color cover to entice walk-in customers, our cover always stood out on a magazine rack filled with other more colorful titles.

DISTRIBUTION

Great: you now have a few hundred pieces of product in your garage or basement. Up to this point, you've invested a lot of your time and money. But where do you send all those packages? The distribution of product now becomes the key to your success. There are many ways to put your product into the hands of your customers, both directly and indirectly.

First, there's the direct approach. You can place ads in your local newspapers; post notices on a local computer store bulletin board (make sure you ask permission, a dealer may not want you selling a competing product in his store--after all, he is paying the rent!); or advertise in regional newspapers, national computer publications (like INFO!), and user group newsletters. If you have a local user group, demonstrate it at one of their meetings. Contact the group's program chairman; he'll probably be *thrilled* to give you a portion of their meeting's program time. Just remember to respect the group and the opportunity they're giving you--user groups weren't formed just to serve as sounding boards for software and hardware companies; they're meant as a gathering place for people to share information and anecdotes about a particular brand of computer. You can find user group addresses in a variety of computer magazines.

If you opt for the direct mail route, don't expect a flood of orders to come in after sending out even a few thousand 'press releases'. Direct mail is a numbers game. The more you mail, the more responses you're likely to get. Bear in mind that a one percent return is considered excellent. If you have the manpower and facilities, you might want to set up a phone order line. Though they're much more expensive, a toll-free order line might be justified. Check with your local phone company for rates. There are also companies that are set up to take phone orders for you. You pay as you go, and you pay for each call to their number. It's a little more expensive, but much less of a headache. Some of the phone services also take care of credit card orders for you, or you might want to check with your local bank about getting set up to take credit card orders directly.

Another direction you can take is distribution to computer stores and other retailers. There are an estimated

32,000+ computer dealers in the U.S. and approximately seven million Commodore computer owners in the world. It doesn't take much math to figure out that there's a potential to make money. But to reach those dealers, you need to find them. You need to know their addresses, phone numbers, contact people, and it wouldn't hurt to know what brands of computers and software they sell. You're not going to sell a Commodore computer program to an IBM-only dealer! One way is to go to your local library and look through the yellow pages for dealers in the major cities.

But you'll have a lot of obstacles to overcome. There's the cost of the phone call, and if you haven't advertised, they won't know whether you're real or not. Put yourself in their place--how many products have *you* bought from a 'cold-call' lately? Before you call your qualified contacts, you'll have to figure out whether you'll offer 'terms' (a specified amount of time before payment is due), or C.O.D. (collect on delivery). If terms, how long, and how do you qualify who's a good credit risk? If COD, do you insist on a certified check or will a company check suffice? And how are you going to ship your products? Contact your local package carriers (like UPS) for rates, and check local codes on shipping from a residence.

You will also find that retailers will not buy your product at the retail price you've chosen. Hopefully, you've kept your costs low enough to allow for a discount for them. After all, they've got to make a reasonable profit on your product, too. Dealers will typically expect a discount off retail of about 30%-50%.

It's a tough row to hoe alone, and you may want some help from the experts in the commercial sector whose sole purpose is to distribute: The software distributors.

Next issue: talking with distributors and the international market.



USER GROUP UPDATE

by Len Lindsay

The value of a local user group is often underestimated. They are usually unrecognized and taken for granted. This INFO column is dedicated to those groups.

NEWSLETTERS

I read hundreds of user group newsletters. I also produce one of my own. So I know what a challenge it is to put together a newsletter. Most newsletter editors do not have a degree in journalism, so their final results are quite an accomplishment! Finding the material to print is hard enough, but then it must be edited and properly printed. Page layout, headlines, empty space, empty pages...Oh no!

What are some of the features that fill the pages in many newsletters? It varies, but here are a few items I notice:

HOW DID WE DO IT?

Your newsletter is a masterpiece. Why not let your members know what equipment and programs were used to create it? NYC-IG is proud to tell you what they used:

Computers: C128, C64, SX64; 1571 & 1541 drives

Printers: Gemini 10x, TTX-1014 Daisy Wheel

Interface: Cardco-A, Consolink MicroSpooler, Xetec-Sr.

Software: Easy Script, Doodle, Flexidraw, Newsroom, Graphic Screen Exporter-64, Print Master, Paint Magic.

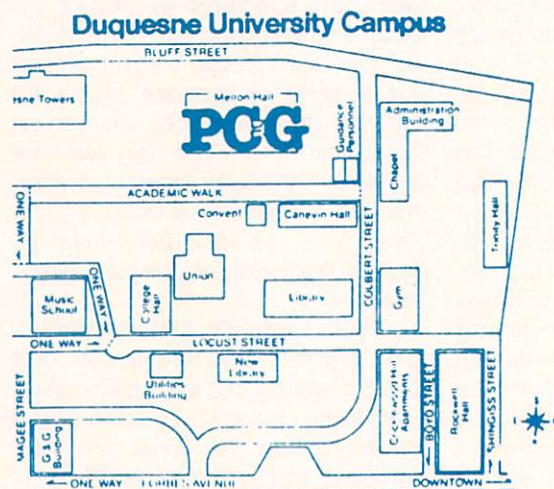
Tele-com: 1650 modem, Q-Link New York Commodore Interest Group
Box 146, 115 Essex Street
New York NY 10002

MAPS

Another thing many newsletters include is a map showing how to get to the meeting. Some maps are done on a

computer with a drawing program. Others are hand drawn. PCG put their group logo on the building where their meeting is held:

Pittsburgh Commodore Group
Box 16126, Greentree PA 15242



Map for Pittsburgh Commodore Group.

CALENDAR

I especially like the monthly calendars many newsletters print. It marks the important days of the month, such as meeting dates. LACC News prints a small calendar on the cover of their newsletter, suitable for taping to the side of a disk drive.

Other newsletters publish full page calendars fit for the side of your refrigerator. The small example on the following page is from Rockville

How can you make a fancy full page calendar? I posted that question on QLink. One reply suggested Create

a Calendar from Epyx. Several other replies highly recommended Print Shop Companion and PrintMaster Plus. Let me know about other calendar maker systems.

Rockville Commodore Users Group
PO Box 8805, Rockville MD 20856

Lansing Area Commodore Club
PO Box 1065, East Lansing MI
48826-1065

NATIONAL ACCLAIM

A few newsletters have honored members who achieve national acclaim. It is nice to know that commercial programs or articles have originated with a member in your own local group. MCCC had a three page article reviewing the Amiga program *Telegames* by local author Scott Lamb. The article was titled: *Local Programmer Produces Sensational Software*

Mid Cities
Commodore Club
PO Box 1578
Bedford TX 76021

HELP

Last issue, I suggested a People Help List as a kind of hot line for members with specific computer problems (or situations!). Now, GCUG seems to have gone a giant step further with a Repair Plan for their members.

This is an interesting idea. I'll be watching their future newsletters to see how it works out. Here is how they set it up:

The plan covers one computer system per member. A computer system includes a computer, disk drive, and



SUN	MON	TUE	WED	THU	FRI	SAT
1	2	3 ELECTION DAY	4	5	6	7
8	9	10	11 VETERAN DAY	12 CLUB MEETING THURSDAY 7:30 PM	13	14
15	16	17	18 COMAL MEETING FOR INFORMATION CALL: 1-800-368-1000 21-149-1304	19 BOARD MEETING COMAL, CALIFORNIA 8:00 PM 21-752-3228	20	21
22	23	24	25	26 THANKSGIVING DAY	27 NEWSLETTER FINAL NOV 28 DEADLINE	28
29	30					

Calendar from Rockville Hardcopy.

monitor. The base coverage is provided to every member at no extra cost and pays 5% of the systems annual repair costs. Extended coverage costs \$5 per year, but pays 40% of the annual repairs. There also are extra cost options for additional equipment such as a modem or second disk drive.

Two pages of their newsletter detailed the plan, including how members were to submit claims and receive payment. Three additional pages provided "facts and figures" explaining how the costs would cover the estimated claims.

Gainesville Commodore Users Group
PO Box 19716
Gainesville FL 32609-9716

DISKS DISKS DISKS...

Most groups provide a useful service for their members by maintaining a disk library of public domain programs. Members may get copies of these disks at very reasonable rates. Many groups have literally hundreds of disks available to their members. Thousands of programs! If your group has a disk of the month type system, and needs 100 or more of the same disk, you may find it is not as expensive as you think to have the disk du-

licated for you. Be careful when choosing the company. I had bad luck with one mass duplicator. But I am extremely satisfied with Nevada Computer. They provide quick turnaround, reasonable rates, and even put your labels (if you supply them) on the disks for you. Disks are top quality and come in tyvek sleeves.

Nevada Computer
Alan McHose
1018 Sixth Street
Nevada IA 50201
(515) 382-5484

If your group copies their own disks, you may have been watching the prices drop on "generic" disks in large quantities (200 or more per order). I have had very good luck with the 25 cent disks from MEI Micro Center. I had only a few bad disks out of several thousand. The price includes the disk sleeve and write protect tabs. Their service was excellent every time (I have made five large purchases from them), and they have a money back guarantee. Shipping is extra.

MEI Micro Center
1100 Steelwood Road
Columbus OH 43212-9972
(800) 634-3478

DISCONNECTED

This is only my second column for INFO, yet already I have an update for you. CUB Newsletter now reports that the 800 number at Douglas Communications has been disconnected.

I called it tonight, and got a pleasant recorded message from the operator. Just as well, since they

also no longer sell Commodore parts due to a recent parts price increase from Commodore. If you are looking for Commodore parts, you may now wish to try Jameco.

Jameco Electronics
1355 Shoreway Road
Belmont CA 94002
(415) 592-8097

Computer Users of Bartlesville
1308 Hillsdale Rd.
Bartlesville OK 74006

SWAP INFORMATION

I'll pass along helpful information that I find in the many User Group newsletters that I read, as well as provide tips to the groups themselves. Groups are invited to send me any information they wish to share with other groups and their users. I get hundreds of newsletters now. And yes, I do read the all. I even keep them in file cabinets! I am interested in reading your groups newsletter too. Just add me to your mailing list:

Len Lindsay
PO Box 6055
Madison WI 53716-0055

As I pass along information from the groups, you may have noticed that I also include their address. If you are in their area, drop them a line. You should find them a good source of information.



ABOUT THE AUTHOR:

Len Lindsay is one of the true pioneers of Commodore computing, and we're happy to be welcoming him to the pages of INFO. He was the publisher of the PET Gazette (the first newsletter for Commodore users) which later became COMPUTE! Magazine. He is also the founder and the head guru of the COMAL users Group. His "day job" is operating the computer system for the state of Wisconsin. You can reach him on QLink as CAPTAIN C.

NEWS AND VIEWS

COMMODORES ON SCREEN

Even with *Max Headroom* gone, there are still plenty of Commodore computers on both the big and the little screens. You may have caught an Amiga 1000 and 1080 monitor in brief appearances in the HBO production called *"Into the Homeland"*. An Amiga 1000 also played the part of



M-M-M-Max

Alan Thicke's computer in the two-part ABC movie *"Not So Human"*, aired on the two Sundays flanking Christmas. But the biggest surprise of the last couple of months was the first ever screen appearance of Commodore's discontinued SX-64 transportable in Nick Nolte's film, *"Extreme Prejudice"*.

ACTIVISION ABSORBS FIREBIRD

In one of the biggest takeovers of the past year, Activision has announced that it has acquired exclusive North American distribution rights to all the software titles formerly distributed by Firebird Licensees. That means the Firebird and Raintree lines, including such titles as *Elite*, *The*

Pawn, *Starglider*, and *Guild of Thieves*. We hear that many of Firebird's U.S. employees are now circulating their resumes, while the British staffers are making plans to return to jobs with parent company Telecomsoft in the U.K.

MORE ON DESKTOP PUBLISHING: AMIGA TEX

Donald Knuth is best-known among computer programmers for his monumental multi-volume reference work, *"The Art Of Computer Programming"*, the programmer's Talmud. But what may turn out to be his most far-reaching lifelong accomplishment is his invention of the TeX typesetting language. TeX (pronounced "tek") was developed out of Knuth's need to recreate mathematical symbology in his programming books. When he discovered that typesetting technology was not up to the task of reproducing his complex equations, he set about developing a language that would allow the integration of complex mathematical typefaces into ordinary text documents. He got a little carried away, and the resultant language has revolutionized typesetting. Originally implemented on minicomputers, TeX has made its way down to personal computers. There are versions of TeX for the IBM/PC and Macintosh, and there is a version for the Amiga.

TeX is not simple, nor is it inexpensive. What it *is* is an extremely versatile control language for printing documents. By embedding the appropriate TeX codes in your documents, you can invoke accents and graves, draw lines and boxes, change fonts and styles, and include complex symbols. Many typesetting shops are set up to interpret the TeX language, and most PC versions of TeX include sets of fonts and drivers for popular printers. *AmigaTeX* comes on 8 diskettes, 5

of which contain the font definitions for the on-screen *Preview* program, which produces some of the prettiest text displays we've ever seen on an Amiga. Printer drivers are available for many printers, including the HP/+, Epson, and even Okimate 20. Each driver occupies multiple Amiga disks and costs \$100.

The version that **Radical Eye Software** sent us is set up for use on our Hewlett-Packard LaserJet+. They were also kind enough to send along a copy of Donald Knuth's manual, *"The TeX Book"*. I'll be honest and say I don't know when I or anyone else around here will have the time to devote to learning a whole language for typesetting. From what we have seen, TeX is capable of some beautiful work, and the Amiga version seems to be very complete. It includes *LaTeX*, a sort of TeX macro language for simplifying complicated composition, and many other utilities and sample programs. The sample printouts look fantastic. It is the sort of thing that I am very, very glad to see made available for the Amiga, because I'm sure that there are people out there who need it. It is also the sort of thing that would take months to review properly, so you'll probably never see a complete review of it in INFO. But we wanted to let you know that it's available, so you can tell all the IBM/PC and Macintosh owners you know that TeX is available for the Amiga, and so you could contact Radical Eye and ask them more about it if you are the type who needs a TeX system.

Well, there you have it. We didn't think a report on desktop publishing on the Amiga would be complete without letting you know about TeX. Now you know, and we feel better. If you want to know more, contact Radical Eye, c/o Computer Consultants, PO Box 27306, College Station TX 77841, 409-696-1078.

VIRUS UPDATE

by Mark R. Brown,
Technical Editor

Last issue we told you about the Amiga virus, what it is, how it spreads, and how to detect and remove it from your disks. Since then, we've gotten some new information.

The problem is serious enough that the button-down-collar types are starting to take note of it. We spotted an article on viruses in the November 28th issue of *The Economist* that mentioned the Amiga virus specifically.

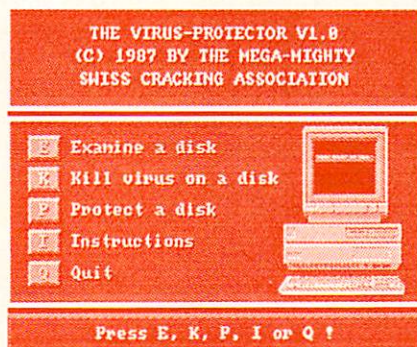
There are a great many rumors circulating about viruses on the Amiga. We've heard of one that supposedly reformats disks in drive df1: We hear that 16 different viruses are circulating in Europe, etc. But we have currently confirmed the existence of only two Amiga viruses.

Bill Koester, Commodore's Virus Doctor, tells us that there is a second confirmed strain of the original virus. This one is the same bug, but someone has modified it to produce a different message. The problem is, the original *VCheck* program won't detect it. He has modified *VCheck* so it will detect both strains of the virus; you can download *VCheck1.2* from most of the major online networks.

Koester recently received a letter from an anonymous "someone" in Europe who claims to be the original author of the virus program (and certain details in the letter tend to substantiate his claim). In the letter, he apologizes for the problems that the virus has caused, and says that his intentions were to provide a bit of "harmless" diversion, not to destroy anyone's disks. He also says that he was utterly amazed to find that in just 3 months, the virus had spread so widely around the world!

We are in possession of another interesting program from the Swiss Cracking Association. This one is called the *SCA Virus Killer*. It has mu-

sic, a hi-res graphics menu screen, and on-screen instructions (in German). This program checks for the original virus, reports what generation that copy of the virus is in (all of ours checked as generations 21 to 25), and can kill the virus as well as permanently "protecting" a disk, or so it says. Personally, we don't trust the doggone thing. Why should we? We've seen the damage their virus can



Virus Killer

do. If you've seen the "Virus Killer" program (and it is circulating in the Amiga community), we strongly suggest that you leave it alone.

Anyway, we sat Tom down with a German dictionary (since he's the only one of us who's had any German) and asked him to translate the on-screen message. Here's part of what the SCA itself has to say about the virus:

THE MAGIC OF COMPUTER BIOLOGY

In every computer there live many little beasties that are just waiting to contribute what they know to the computer. Even in your own Amiga, hundreds of beetles, bugs, and microorganisms are housed, the most famous of which is the SCA-Virus, to which we now direct our attention:

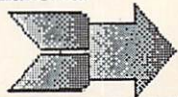
The SCA-Virus is a joke that installs itself on all disks that you put in the disk drive. The cute little thing prefers to make its home in the bootblock of the disk, and while it is

left undisturbed it will reproduce all its data, replacing what was living on the bootblock before. All is well as long as the bootblock is uninhabited anyway. Lately, more and more programs claim the bootblock for themselves; for example, some games like Barbarian, Terrapods, Outrun and many others. Our little virus naturally has a fatal result on these programs and thus every pirate copy is rendered useless...We must, at this point, put to rest some of the rumors that certain people have been spreading about our harmless virus: IT IS IMPOSSIBLE FOR THE VIRUS TO BECOME ABLE TO DESTROY ANY KIND OF PROGRAM OUTSIDE THE BOOTBLOCK, SUCH AS SOURCE-CODE OR TEXTFILES.

Of course, their little disclaimer is somewhat less than accurate. Part of the problem is that the *SCA Virus* installs itself in RAM where it thinks the stack is. But the stack in the Amiga is a mobile thing. It's very possible to have an application running that expects very different code to be in place where the virus "lives", and that can cause unexpected results--everything from corrupted data to Guru meditation errors.

Commodore is working on a new "generic" virus checker that will detect any and all bootblock viruses. Actually, it will check for valid bootblocks against a user-expandable list of valid bootblock profiles, and will repair any corrupt blocks it finds with the original, uncorrupt boot information. This will provide a much more general vaccine for all kinds of disk viruses, and will be able to resurrect commercial program disks as well as standard AmigaDOS disks. It's a top development priority at Commodore, so look for it to be available soon.

In the meantime, be vigilant. Don't panic, but check your disks, even the commercial ones. We recently received this interesting little article from an INFO reader in Oklahoma:



COMMERCIAL SOFTWARE CARRIES VIRUS

by Bruce Yarbor

With all the paranoia about the Amiga virus, many Amiga users are scared to download public domain software, or even take any from close friends. And just how serious is the threat of getting it on commercial software, anyway?

Mary Beth Gaurd of Oklahoma City recently found out. She bought a graphic adventure from Constellation Software called *Gnome Ranger* that had the virus on it. It took 3 days for the disease to show its ugly face, but it transferred itself to 12 of her disks before the 'Something Wonderful Has Happened' message showed up. She says, "I'm paranoid now, I'll never use my computer without first checking that my disks are write-protected."

I contacted Constellation Software, and a spokesperson named Angie told me that when they received the program from England, the first master disk had the virus on it. They sent it back for a 'clean' replacement before they released *Gnome Ranger*. But the virus had apparently already gotten into their other disks, and it managed to make it onto the version released to the public.

Constellation Software, which sells seven budget priced games for the Amiga, was understandably concerned when I told them about the virus problem. They called me the next day to thank me for the quick report and to tell me that they have recalled 1700 pieces from their distributors. If you have received an infected *Gnome Ranger* disk, they will replace it free of charge. Send it to this address:

Constellation Software
17 Saint Mary's Court
Brookline, MA 02146

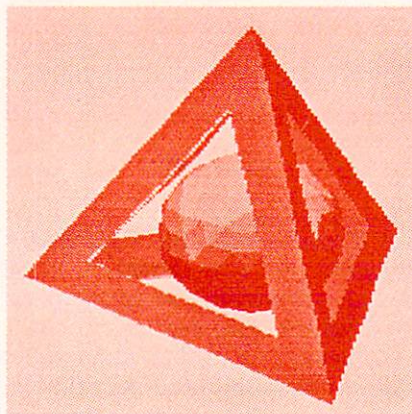
Editor's note: The copy of Gnome Ranger that we received from Constel-

lation also has the virus. If you have purchased this program, we strongly recommend you check ALL of your disks with Commodore's VCheck1.2 program. It is available now from many users groups, as well as online from BIX, PeopleLink, QuantumLink, CompuServe, and many local BBS systems.

-Mark

COSMI GOES IRIDIUM

Cosmi recently announced that they have sold over 1,000,000 software programs in their five-year history. At an average of probably about 40 hours of gameplay for each game sold, that means that Cosmi is responsible for the frittering away of almost 20,000 man-years of productive time! Congratulations, Cosmi!



Arkanoid's *Pyradoks*

INFO MANIA GAME TIPS! HOT ARKANOID SECRETS!

Many games have hidden features, secret "back doors", or odd programming oversights that let you creatively enhance your score.

To enter Arkanoid's "back door", boot and run the game as usual. Select a start screen and begin the game, then hit the space bar to pause it. With the game paused, type in *dsimagic* without spaces and without hitting RETURN. Unpause the game by tapping the spacebar again.

A special yellow Power Capsule with the letters "DS" on it will fall down the middle of the screen. Catch it, and you'll be able to call up any Power Capsule you want at any time in the game! You simply press the first letter of the Capsule type you want, and it will roll down the center of the screen for you to catch. Here are the Capsules available: Slow, Catch, Expand, Disruption, Laser, Break, and Paddle. We suggest that the first thing you do is catch several Paddle Capsules to give you extra lives.

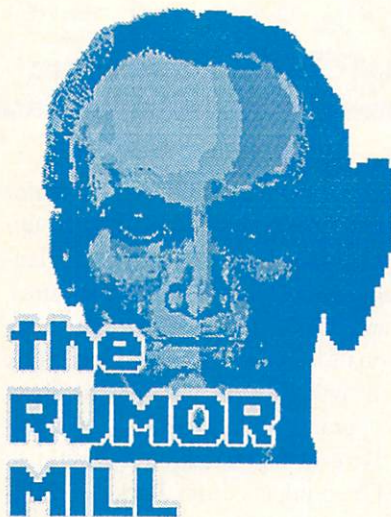
An added bonus is that in this mode it's possible to have several different normally incompatible attributes active at the same time. For example, you can Disrupt the ball into three balls, then call up Lasers, too!

There are two more special features of Arkanoid's "cheat mode". Hitting the F key will teleport you to the Final Screen and a confrontation with *DOH* (Dominion Over Hour). Make sure you have plenty of extra lives first! The other feature lets you skip any screen you don't want to play by simply hitting the ENTER key on the numeric keypad. You won't get any points for the screens you skip, though, so you might prefer to just use a Break Capsule. It will give you the score for all the bricks on the screen.

That's it! Have fun racking up 1,000,000-point-plus scores playing Arkanoid!

If you've discovered secret tricks or hidden "back doors" in your favorite game software for the C64 or Amiga, share them with INFO and we'll give you credit and send you a world-famous INFOManiac Kit! send all tricks to: INFO Mania, PO Box 2300, Iowa City IA 52244.

INFO SUBSCRIBERS: Look for more great game secrets for *Barbarian* and *StarGlider* in the *INFO Wrap-Up* this issue! These EXTRA game secrets are just one more reason to subscribe to INFO!



DISCLAIMER: The following are among the most entertaining rumors we've heard the past couple of months. They are presented for your entertainment and amusement only. Please do not base any important decisions on these rumors, as many will prove to be inaccurate or just plain false.

> We hear that a Respected Amiga Developer will have an *AppleTalk* network ready for the Amiga by late Summer or early Fall.

> The 64 may make a mockery of Apple's cry of "Apple II Forever!" While the Apple II line is losing ground to the Macintosh, the 64 just keeps on rollin'. Commodore officials tell us that C64Cs weren't even being warehoused during the Christmas rush; they were loading them onto trucks directly off the end of the assembly line.

> We also hear that there is a new C64 model in the works! This one will sport a built-in 1581 disk drive, and will feature disk speedup ROMs, switchable with an old "standard" ROM for software compatibility. A separate rumor says an 80-column screen and built-in 1764 RAM expander are definite possibilities. Look for it at Summer CES in Chicago.

> We hear that there is a strong push to put out a model of the A500 in an A1000-style case. It seems that many users are crying out for the better ergonomics of the older model.

> A Little Bird tells us that *Kind-Words* was originally supposed to have been *Deluxe Write*.

> A third-party company allegedly has a *C128-on-a-card* under development for the A2000 buss. It would allow A2000 owners (and A500 and A1000 owners, with the proper adapters) to run 99.9% of all C64 and C128 programs in an Amiga window at full speed.

> We hear an *Apple II/IIIc* card is in the works, too!

> What's the next great thing to come from the folks at *Amazing Computing*? How about a *Macintosh magazine*?! They've produced *Amazing* on Macs since day one, so it seems like a natural. We hear they'll be pushing their new publication at the next MacWorld Show.

> Activision supposedly had *Portal* translated to the ST and ready to ship, but decided not to at the very last minute. The reason? Though they only needed to sell 1000 units to break even, piracy is so rampant in the ST market that Activision wasn't sure they'd sell that many! Let's hope we never see this happen in the Amiga market!

> We've heard one estimate from inside Commodore that as many as 80% of the A500s out there are equipped with one megabyte of RAM.

> A2000s are finally starting to get out to dealers with some regularity, we hear. The crunch was so bad at one point that we were hearing horror stories from dealers like the one who got 16 A2000s but only 4 keyboards!

> We've heard at least three first-hand stories in the past couple of months from software companies claiming that they have had products stolen from them by other software companies, and we're talking the Big Boys, not just mom-and-pop operations! It seems that some companies are finding out that it's cheaper to steal someone else's product and pay their lawyers to tie things up in court for years than it is to hire programmers to develop software from scratch.

THINGS WE'D LIKE TO SEE

> An online service that would be inexpensive, quick, easy-to-use, and would provide access to most of the world's information in an organized, indexed form. We know it's got to happen someday, but we don't see anyone working on it yet!

> A user-supported clearing-house for the support and continued distribution of "orphaned" programs. This outfit would take in programs that are lost to the world when companies go out of business and make sure that users of those products could share mutual knowledge and support. It would also pick up the rights to and continue to make available software titles that might otherwise vanish from the face of the earth, like *Simon's BASIC*, *Ken Uston's Blackjack*, or *Paint Magic*.

> Removable, non-mechanical mass storage. For example, 10-megabyte bubble memories, or even sophisticated holographic or molecular storage. More reliable than mechanical disks or tapes, solid-state, unpowered storage devices would finally provide a real mass storage solution.

> An inexpensive laser printer/photocopier/FAX machine combination. Why not? they all use the same print engine. They just use different methods to get the image onto the paper.

> A new, more exciting format for adventure-type games. The old "dungeons & hit points" approach is really wearing thin.

> A laptop Amiga. Please.

> A "CALC" command for the Amiga's CLI that would just print the result of any typed-in equation: "CALC 4+5-3" would print "6". It's the thing we miss most about having BASIC just a keystroke away on the C64.

> A full spellchecker/thesaurus/dictionary with definitions.



INFO UPDATE

NEWS UPDATES

There's been a price reduction on **True BASIC** for the Amiga: **True BASIC** itself is now only \$99.95, or \$149.95 with the runtime module. They have completely eliminated the runtime license fee for commercially released software written with **True BASIC**.

David A. Hook writes to tell us that the **CSLIDE** program we listed in *The Best Of Public Domain* in issue #17 is his work. Thanks to a typo, we attributed it to a fictitious "D.A. Hoff". Sorry, David! He also informs us that Stephen Murri and Frank Covitz are responsible for the program's dissolve routines, and Mark Moorcroft and Chris Zamara also provided valuable portions of the code. The final result of all this collaboration, he tells us, is more properly titled "**CSLIDE SHOW**". Thanks for the **INFO**, David!

Reader Howard Bussen tells us that our review of **Pocket Writer 2** in the last issue was not quite right in saying that the program would not do newspaper-style multiple columns. Though it isn't properly documented in the **PW2** manual (which is why we missed it), it *will* do columns if you use alternate screens, and he sent us some 3-column output to prove it! Thanks, Howard!

A typo was responsible for a wrong box number on Gallery P.D. Software's unclassified ad for digitized Amiga nudes last issue. The correct address is: PO Box 2650, Athens Ga 30612-0650.

MOVES

New Horizons Software has a new address: 206 Wild Basin Rd.,

Suite 109, Austin TX 78746. The new phone number is 512-328-6650.

MicroProse has moved (but they haven't picked a new name for their company yet). The new address is: 180 Lakefront Dr., Hunt Valley MD 21030. The new phone number is 301-771-1151.

SOFTWARE UPGRADES

Software Vision has released version 1.02 of **MicroFiche Filer** for the Amiga; this version supports the European character set and includes a stand-alone **Text Import Utility**. Updates are \$9 for registered owners. The **Text Import Utility** is also being distributed on **PeopleLink**, **BIX**, **QuantumLink**, and on **Fred Fish** disk #103.

New Horizons has a new version of **Prowrite** for the Amiga. Version 2.0, which costs owners \$20, includes many new features: print merge, faster graphics printing, hi-res smoothing, sideways printing, a new 95,000-word spellchecker, paragraph sorting, and many others, including user-selectable screen colors and defaults. Sounds like a *major* update.

Registered Amiga **FastFonts** owners can update to version 1.1, which includes support for the **TOPAZ-11** font, by returning the coupon that **MicroSmiths** is sending out to them, along with \$10. If you didn't get a coupon, check with Charlie Heath and company. The update diskette also includes the **AmigaDOS Replacement Project** commands (v1.2) and **BlitzDisk**, a disk-caching utility with many options. If all you want is the update to **FastFonts**, you can download a file called *ffupdate.arc* which will update your original disk; it's available on **BIX**. **MicroSmiths** is also

coming out with **TxEEd Plus**, a major upgrade to **TxEEd** that will include support for the **AREXX** text editing language as well as many other features, all in a file about the same size as the original! Registered owners can look for a mailing with information about the upgrade.

Here is the status on upgrades to **GEOS** products from Berkeley Software: You can upgrade to **GEOS 128** from **GEOS 64** by sending \$22 + \$2.50 shpg. and the **GEOS** package sleeve. **GeoWrite 2.0** owners can upgrade to **GeoWrite 2.1**, which extends the margins to a full 8 inches, for \$15.50 + \$4.50 shpg. and the original disk. You can upgrade to **geoWrite Workshop 128** if you send in your *Writer's Workshop* disk and \$20.50 + \$4.50 shpg. If you were unlucky enough to have bought the original **GeoFile**, they'll send you an update that *works* if you just send them your disk. You can update the 64 version to **GeoFile 128** for \$20.50 + \$4.50 shpg. and the old disk. And you can upgrade **GeoCalc** to **GeoCalc 128** for the old disk and \$20.50 + \$4.50 shpg.

Brown-Wagh has announced a major upgrade to **Publisher 1000** for the Amiga. **Publisher Plus** now includes Postscript support, including support for Postscript fonts and font scaling. **Publisher 1000** owners can upgrade for \$18.50 plus the original disk.

The classic Atari/Namco C64 games **Pacman**, **Ms. PacMan**, **Dig-Dug**, **Pole Position**, and **Galaxian**, originally available on cartridge from Atari, are now available on disk from Thunder Mountain. The price is only \$9.95 a title. If you missed these classics the first time around, here's your chance to pick them up for a song!

New Products

COMMODORE 64

SUPER AIDE

Free Spirit has released *Super Aide* for the C64. This \$29.95 programmers' utility kit adds autonumbering, delete, renumbering, search-and-replace, directory, find-variable, and many more programming commands to BASIC. It also adds hi-res and lo-res screen dumps, a disassembler, a machine code monitor, and other valuable tools. 905 W. Hillgrove, Ste. 6, La Grange IL 60525, 312-352-7323.

BATTERY RAM

Scinort Micro's new *Battery-RAM* cartridge lets you store an 8K BASIC or m/l program between sessions, and it can even auto-run the program on power-up. The cart includes a standard AA battery. \$24.95 + \$2.50 shpg. PO Box 17546, Austin TX 78760, 512-440-1022.

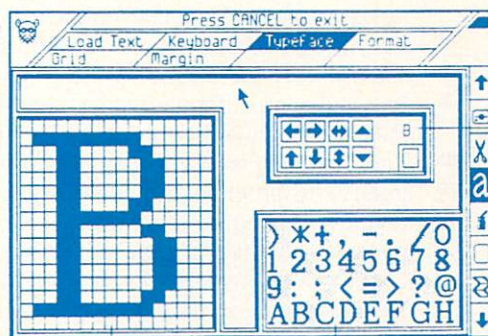
BATTERIES INCLUDED

Electronic Arts continues the *Batteries Included* tradition of providing regular upgrades to *Paperclip* with the release of *Paperclip III* for the C64/C128. This latest version is no longer dongle protected, and the package includes separate disks for the C64 and C128. For \$49.95, you get all the features of *Paperclip I & II*, plus some. This version includes definable keyboard macros (which they call Instant Phrases), a built-in outline generator, telecommunications capabilities, an expandable 40,000 word spellchecker, and support for the 1750 RAM expander in C128 mode. Benn immediately glommed onto the copy EA sent us. With all the wordprocessors we have at our fingertips, he still uses *Paperclip* to produce our run sheets because of its unmatched column manipulation capabilities. EA is offering *PC III* as an upgrade to cur-

rent *Paperclip* owners who send in \$18 and the cover from their manual. Even better, owners of any other wordprocessor can upgrade to *PC III* for \$28 plus their manual cover. It'll be interesting to see which owners of what wordprocessors take advantage of the deal. 1820 Gateway Dr., San Mateo CA 94404, 415-571-7171.

TYPES OF BATTERIES

Also from EA/Batteries Included is *Outrageous Pages* (\$49.95), the latest in desktop publishing for the C64. Besides page layout capabilities, this package includes 50 fonts and 80 pieces of clip art. The software sup-



Outrageous Pages
Desktop Publishing for the C64

ports mouse or joystick operation via pull-down menus. It's compatible with *Printshop* and *Newsroom* graphics, and includes a font editor and full-page paint program. EA is also offering a trade-in-somebody-else's program offer on this package. Just send in \$28 with the cover of any other C64 graphics program. INFORMed sources tell us, by the way, that *Outrageous Pages* is an American adaptation of a British program called *Stop Press!*

WIRED FOR SOUND

One of the oddest items I've had the pleasure to unwrap lately is a copy of *Catfish Bill's Guitar Wiring Di-*

gest. This \$5 magazine-on-disk is mostly a set of computer-rendered wiring diagrams for guitar-modification projects. If you're a guitar-modifying kind of a guy and you own a C64, check it out. 4450 Sherwood Lane #10, Houston TX 77092.

BECKERBASIC

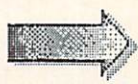
BeckerBASIC (\$49.95) from Abacus Software, is a BASIC language that runs under the *GEOS* operating system. It adds over 270 commands to standard BASIC for hi-res graphics, sprites, sound, structured programming and more. It also features user-defined *GEOS* menus, dialog boxes, and fonts, and includes a free runtime module so you can distribute programs you develop with *BeckerBASIC* free of royalties. 5370 52nd St. SE, Grand Rapids MI 49508, 616-698-0330.

EASY TO READ

Kidsview Software makes software that displays quadruple-size text, which makes the computer a friendlier environment for kids and the visually impaired. *Kidsview* lets you write your own software in big print; *Kidsword* is a large-print wordprocessor; and *Mount Murdock* is the first of a series of large-print adventures for kids. Each is \$39.95 + \$3 shpg. PO Box 98, Warner NH 03278, 603-027-4420. (The programs are also available from Briwall.)

MAIL ORDER PD

Those of you looking for a mail order source of public domain programs might want to check out *Comp-U-Save*. They have hundreds of PD disks for the C64, C128, and Amiga at \$4/each, plus \$2.50 per order shpg. Call or write for information on their catalog. 414 Mapple Ave., Westbury NY 11590, 516-997-6707.





... continued

WAY BACK WHEN

What happened on your birthday? How about on January 13, 1913? *Time Traveller* can answer these burning questions, and it can answer for any month in the 20th Century. Important news items, who won the Oscars, and the price of common items like bread and houses are all indicated on-screen and can be dumped to the printer. 20 sheets of "Time Traveller" imprinted paper are included. **Nationwide Computer Industries** suggests setting up a computer at fund-raisers and charging a buck apiece for printouts. Why not? 205 McCormick Ave., Hawkinsville GA 31036, 912-783-1158.

COMMODORE 128

BUG GUMSHOE

American Made Software has released a C128 version of their *Micro Detective Professional Debugger* for BASIC 7.0. It provides you with a BASIC trace function, and decrypts error messages, highlighting errors in color and interpreting the error for you in English. It's \$49.95. PO Box 323, Loomis CA 95650, 916-652-5338.

40-80 OR 80-40

From **Briwall** comes *ColorEZ 128* (\$12). This utility converts 40-column graphics screens to 80-columns, and vice-versa. There are two modes; in the first, a 40-column screen becomes half of an 80-column screen. In the other, it is expanded to a full 80-columns. The results are compatible with the C128's built-in BASIC 7.0, and with *BASIC 8.0* from Patech. PO Box 129, Kutztown PA 19530, 215-683-5433

FORMAT EXECUTIVE.

Format Executive v3.0 from **Powersoft** is a formatting and file transfer program for the C128 & 1571 disk drive. It will handle over 100 different MS/DOS, CP/M, and native Commodore formats. Copy, rename, erase,

and directory commands are all supported, as well as wildcards. \$59.95. PO Box 7233, Bradenton FL 33507.

STOCK ANALYSIS

For the security-conscious, there's *Securities Analyst-128* from **Free Spirit Software**. This stock analysis program displays all text on the 80-column screen and all charts on the 40-column screen for simultaneous viewing. (The disk also includes a 40-column-only version.) It also provides dot-matrix printouts of its results. \$49.95. 905 W. Hillgrove, Ste. 6, La Grange IL 60525, 312-352-7323.

BASIC HELP

For \$24.95, *The C128 Helper* from **Software Support International** provides you with a complete online manual for BASIC 7.0, accessible through the 128's HELP key. A touch of the key pulls up information on any of BASIC's keywords from helpfiles on disk, and then returns you to your program. This program also allows you to define your own helpfiles, which opens up all kinds of possibilities. You could even create entire tutorial/educational or data/cross-reference programs using *C128 Helper*. 2300 NE Andresen Rd., Vancouver WA 98661, 206-695-1393.

AMIGA

TAKE STOCK

Serious investors can track their stocks with *The Investor's Advantage* for the Amiga from **Software Advantage**. Besides analyzing stock prices and trends every way from Sunday, it also features a telecommunications interface that will let you pull down stock quotes from *Warner Computer Systems* on *CompuServe*. It's Amiga-tized with menus and mouse, and isn't copy-protected. \$99.95. 37346 Charter Oaks Blvd., Mt. Clemens MI 48043, 313-463-4995.

QUESTION:

What's the problem with 10-meg, or even 20-meg or 40-meg hard drives on the Amiga? A: They fill up. No matter how much storage you start out with, the Amiga's graphics, sound, and data manipulation capabilities are so vast that storage media fills up fast. What's the solution? We think that it lies in replaceable mass-storage like the *Bernoulli Box* replaceable cartridge, or **Supra's** new *FD-10* 10-megabyte 5.25" floppy drive. The *FD-10* uses normal-looking but very dense



Supra 10FD, removable storage for the Amiga

floppy disks to store lots of data and access it at near hard drive speeds. With an Amiga interface, the units will sell for \$1095. Not bad for a drive with the storage capacity of a hard disk and the infinitely-replaceable media of a floppy! 1133 Commercial Way S.E., Albany OR 97321, 503-967-9075.

C PROGRAM

If you're not a C programmer you can ignore this item. But if you are one, *CBTree* from **Peacock Systems** might just save you some grief. If you need to handle disk records and lots of



information, *CBTree* provides the functions you need for quick data handling. \$99. 2108C Gallows Rd., Vienna VA 22180, 703-356-7029.

LOVE THAT NAME!

Folks have tried a lot of different approaches to sidestepping the CLI. *WBExtras* from Lynn's Luna C (love that name!) is the latest of the lot. This one takes the tack of adding user-configurable extra menus to the Workbench. You can actually add your own favorite utilities as menu items. It's an interesting approach. *WBExtras* is \$39.95. PO Box 1308, Canon City CO 81212, 303-275-5858.

DACHSHUND DRIVE

Phoenix Electronics has added an Amiga external 3.5" floppy drive to its hardware lineup. The *PFD-135* is a lo-o-oong puppy, but it's nice and slim. (A dachshund drive?) It's \$229. If you've got the "underpowered A500 blues", Phoenix offers the beefy *CPS-500* 8-amp replacement power supply for \$99.95. PO Box 156, Clay Center KS 67432, 913-632-2159.

DATA RETRIEVER

On the wordprocessor/database front, the software just keeps on comin'. Abacus Software has released both for the Amiga: *TextPro* features graphics merge, auto-hyphenation, and custom high-speed printer drivers, all for \$79.95. *DataRetrieve* is the same price, and features screen masks, up to 80 index fields/record, up to 8 active databases at a time, and more. 5370 52nd St. SE, Grand Rapids MI 49508, 616-698-0330.

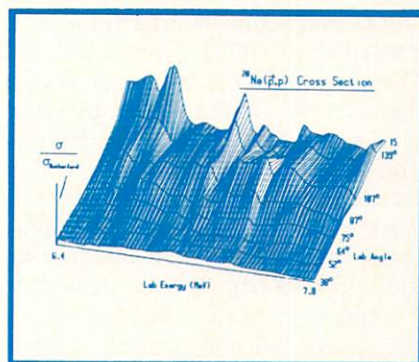
C AMIGA BOOK

If you are already familiar with C but don't know where to start in programming the Amiga, you might check out the two-volume *Amiga Programmer's Handbook* by Eugene P. Morthmore. Taken together, they are

almost 1000 pages of reference on the Amiga's operating system and how to get it to do the stuff you want it to do. Volume I is almost twice as thick as volume II, but each costs \$24.95. Sybex, 2021 Challenger Dr. #100, Alameda CA 94501.

CAD SYSTEM

Progressive Peripherals & Software's new *Intro CAD* program is designed to be a CAD system to learn on, or for those who have occasional need for object-oriented drawing software for projects like room layout, illustration, and hobbyist circuit design.



Intro Cad, entry level drafting for the Amiga

It allows for such esoterica as user-defined parts libraries, and the quad-density printer drivers let you output some pretty good-looking drawings on ordinary dot-matrix printers. \$79.95. 464 Kalamath St., Denver CO 80204, 303-825-4144.

ACCELERATORS

While the v1.2 AmigaDOS command *addbuffers* will speed up disk access, it does so at a cost of using up valuable chip RAM. Now there are two disk accelerators that do essentially what *addbuffers* does, but they use less critical fast RAM to do it, and in the process speed up disk access even more. *FACCII* from ASDG features "on-the-fly" reallocation of buffers

and an intuitive user interface. \$34.95. 925 Stewart St., Madison, WI 53713, 608-273-6585.

THE DIRECTOR

The Director (\$69.95) is a slideshow/animation/scripting language that allows the interactive display of IFF images and ANIM animation files. With it, you can not only produce video presentations and animated demos, but interactive games and educational programs, too. From *The Right Answers Group*, Box 3699, Torrance CA 90510.

FASTFONT

MicroSmiths' *BlitzDisk* is included on the latest release of *FastFonts* (\$29.95). It works with v1.04 of the ARP (AmigaDOS Replacement Project) command set, which is also on the disk. [I have been using the ARP commands exclusively for the past couple of months, and I have gotten so used to their expanded wildcard capabilities and wider range of options that I couldn't survive without them.] PO Box 561, Cambridge MA 02140.

FORTTRAN USERS

If you're a mainframe FORTRAN user, you can now get a full ANSI FORTRAN 77 implementation for the Amiga from AbSoft. *AC/FORTRAN* costs \$295 (\$495 in a version for the 68020), but it generates true 68000 machine code, provides a full debugger and complete development tools for writing mainframe applications, and will run even on a 256K, single-drive Amiga system. For those who have been waiting for a compiler for *AmigaBASIC*, *AC/BASIC* is it. It's 100% compatible with *AmigaBASIC*, and compiled programs run up to 50 times faster. It includes many extra features and options, and lists for \$195. 2781 Bond St., Auburn Hills MI 48044, 313-853-0050.



Public Domain

DEFINITIONS--

PUBLIC DOMAIN: Not copyrighted; available to all; free for the copying.

FREE-ACCESS: Copyrighted but released for free public use; not to be resold for a profit.

SHAREWARE: Copyrighted but available for copying, with a donation requested from those who use the program.

QuantumLink Gems

By Saul E. Cohen

BLACK BOX.LBR ★★★★★

FROM: DBUG Rep

Location: CSS/ Software Library/ Game Room/ Stuff & Nonsense

Date: 10/22/86 - 09/07/86 43 Blocks

Author: Zechiel D/L times 1200-2:46 300-9:43

Joystick port #1

Additional programs: Sequential file reader (like Ultra), Library 9.0

This program is the best version of the *Black Box* game I've ever seen. The computer acts as the codemaster and hides 4 circles within an 8 by 8 grid. Your job is to determine the location of the circles within the grid. You accomplish this task by sending invisible rays into the box from the outside edges. Rays enter and exit according to a predefined set of rules. Rays may be absorbed, reflected or bent depending on how close they come near the hidden circles. The rules are given in a text file which accompanies the program. This is a great game for teenagers and up to develop logical thinking skills.

ICON EDIT 2.1 ★★★★★

FROM: TerryM10

Location: CSS/ GEOS ARENA/ Software Library/ User Application/

Date: 02/22/87 - 04/17/87 20 Blocks D/L times 1200-1:17 300-4:31

Joystick port #1

Other Programs Required: Convert

Suggested Programs: icon edit 2.doc

Use this GEOS utility program to design or modify the picture icons for your files. As with most downloaded GEOS files, icon edit 2.1 must first be converted to GEOS format. Use the *Convert* program found in the GEOS library. Once converted, simply boot GEOS and double click over the *Icon Edit 2.1* file. Always start by telling the icon editor which file you want to work with, then begin the editing process. You can start with the existing file's icon or from scratch. *Icon Edit 2.1* makes use of the joystick to design your icons. When the icon is completed, save (called "use") it back to your file. You may also copy the icon into a buffer for use with another file. You can even use sections of a geopaint scrap to design your icon. Read the documentation for further details.

LABEL PRO4.1 ★★★★★

FROM: Ccccc1

Location: CSS/ Applications/ home/ mailing list/

Date: 10/23/85 - 04/05/87 36 Blocks

Author: Steve Boal D/L times 1200-2:19 300-8:08

Printer Required

Shareware: Donation of \$5 requested

Suggested Programs: label Pro4.1.doc

Here is a neat little program to produce your address labels. *Label Pro4.1* makes use of some neat window graphics. Enter the number of print

lines. Then enter the address. Print out from 1 to 99 labels at one time. The one flaw to this program is that addresses cannot be saved to disk. But the program makes up for it with its ease of handling.

ULTRA ★★★★★

FROM: Bob k7

Location: CSS/ Software Library/ Q-Link Utilities/ Text File Readers

82 Blocks (includes documentation)

Author: Bob Kober D/L times 1200-5:17 300-18:32

Suggested Reading: ultra.doc (included)

Ultra is a marvelous program written by Bob Kober. Bob is one of Q-Link's Programming Workshop's Sysops. *Ultra* is an "ultra sophisticated" sequential file viewer. You can read or print any type of sequential file in one of several ways. Files can be printed out in single or double columns. Make sure to download *Ultra* from the Q-Link Utilities section. The documentation will download at the same time. *Ultra* is an excellent utility for all your sequential file needs.

GEOFORMAT ★★★★★

FROM: cosmac

Location: CSS/GEOS ARENA/ Software Library/ User Applications/ Application Library/

Date 02/22/87 - 04/17/87 15 Blocks D/L times 1200-:58 300-3:23

Other Programs Required: convert

The original format program which comes with the GEOS disk is rather slow. This is no longer the case with this updated version. First download *GEOFORMAT* to a GEOS workdisk. Change it into GEOS format using the *Convert* program. Double click over the *GEOFORMAT* icon and you are



Graphic via Display DD+DMP.

ready to format any number of diskettes. Formatting is now fast and efficient. A worthy addition to your GEOS utility library.

LFS FORM MAKER2 ★★★★★

FROM: LouSander1

Location: CSSI/ Special Edition/ Louis F. Sander/ Private Library/

Date 06/14/86 - 09/09/87 33 Blocks

Author: Louis F. Sander D/L times 1200- 2:08 300- 7:27

Louis Sander has come up with one of the most popular utility programs on Q-Link. Select the number of columns and rows on your 1525 or compatible printer and a perfect form is printed out each time. You can even

enter customized heading and row names. There are several versions of the program which include LFS FORM MAKER2, the original LFS FORM MAKER and LFS FORM MAKER2A. LFS FORM MAKER2 was selected because you can save your form's format to disk. Check Louis F. Sander's personal collection for further details. A few people have reported having trouble printing out forms saved by version 2. If you experience this problem, you still can easily recreate any form for reprinting.

DISPLAY DD+DMP ★★★★★

FROM: Fleximan

Location: CSSI/ Software Library/ Graphics/ Utilities/ Slideshows/ Display Pgms

Date 10/08/85 - 12/11/86 29 Blocks

D/L times 1200- 1:52 300- 6:33

Other Programs Required: Doodle Files

Select, display and print your Doodle files with this unique utility. When this program is run, it automatically creates a doodle directory on the screen. With a few keystrokes you can easily view your pictures and print

them out on your 1525 compatible printer in one of two sizes. Check out the Masterpiece Gallery in the Graphics section of the Software Library for some neat pictures. Doodle picture files begin with a "dd" prefix.

PEOPLELINK 64 & 128

by Robert Umfer

NIGHT FLIGHT ★★★★★

Section 3 File #6818

Tom Gerchmez has written a very nice public domain flight simulator for the C64. All of the commands of commercial simulators are included. Be sure to copy them onto paper to make using this program easier. This is one of the finest PD programs and is 78 disk blocks long.

RUSH HOUR ★★★★★

Section 8 File #6798

Michael Bailey has transposed the Frogger idea into an attractive and challenging 64 game called Rush Hour. Use your joystick in port number one to help Ernie pick up the money bags in the street. Watch out for the trucks! Easy and difficult levels are included. This is a 35 disk block program.

FLOWERS ★★★★★

Section 7 File #7098

Doug Quinn's original Macintosh file has found its way into a crunched REL format for the C64. This file is just an example of what kind of graphics your 64 can create. Be sure to use CSLIDE 1.9 to view this and any of the hundreds of graphics files found in section 7. 16 disk blocks long.

STEREOPLAYER 8.0 ★★★★★

Section 6 File #7110

Mark Dickinson has upgraded his StereoPlayer to an incredible piece of programming. It plays stereo as well



ABOUT THE AUTHOR:

Saul Cohen is an eighth grade science and computer teacher in Montgomery County, Pennsylvania. He also teaches a variety of computer courses to teachers. Saul's computer interests include wordprocessing, teaching applications, and of course telecommunications. You can reach Saul on QuantumLink via EMail to INFO SC.

as regular SID files, with magnificent on-screen graphics. Well worth the download time. This 153 disk block file is a self-dissolving arc file. Browse through the hundreds of SID songs in this section while you are there.

C128

NEWS: Section 10 of *Plink's Commodore Club* is now called *Arts and Leisure 128*. Look here for music, graphics, and games for your 128. Section 11 is still for CP/M, and section 12 is mostly utilities.

UPDATE: John Pich has updated his *SIDPLAYER1750* to an all-menu driven program. Look for file #6638, *SID1750.VB.SDA*. It's now in compiled BASIC, too.

CATCHUM.LBR ★★★★★

Section 11 File #7106

It's not often that a fast-moving game appears in CP/M format, but *CATCHUM* can't be overlooked. Almost identical to PacMan, *CATCHUM* uses decent graphics and speed. It's just as frustrating as the original, too. It's not written in BASIC, so you don't need any compiler to make it run. This file uses 24.5K of your CP/M disk. You'll need *LT18* to de-library it, too.

COMMAND.SDA ★★★

Section 12 File #7104

COMMAND permits you to use your 128 in an MS-DOS fashion. Written by Jim Thibodeau, you can copy, run, and type programs to the screen with very few keystrokes. Disk commands and direct block access are available also. This is a lesser copy of Chris Smeets' commercial *CS-DOS*, but will improve

greatly as more commands are added. It uses 34 disk blocks in its self-dissolving arc format.

FONTS128.80.SDA ★★★★★

Section 10 File #7177

No one is taking credit for this font loader and collection of 17 fonts for the 80-column 128. Run programs with the font of your choice, or include one in a program that you are writing. It's easy to use and most fonts are very clear on the screen. This self-dissolving file is 113 blocks long.

RUN64.FROM128 ★★★★★

Section 12 File #7178

Are you tired of switching to 64 mode and waiting for those lengthy programs to load? Then this program is for you! Load it in 128 mode, type in the name of the 64 program you want to load, and voila! It's loaded quickly from the 1571 and your computer is switched to 64 mode for you. Kevin Heisel supposedly wrote this 3-block program. It's great!

RAMDOS128.SDA ★★★★★

Section 12 File #7153

CBM has finally come out with its long-promised "RAMDISK" for owners of RAM Expansion Units. This program permits you to use your REU as another disk drive, loading from and saving to the 2016-block buffer with lightning speed. Copying files to the REU is accomplished only with *FILECOPY.BAS*, included in this self-dissolving arc file of 70 disk blocks.



ABOUT THE AUTHOR:

Robert Umfer, as CBM*BOB, shares the Sysop duties with CBM*LARRY in the Commodore Club section of American PeopleLink. He has a B.A. in French and an M.A. in computer science. His 'day job' is teaching high school French and Spanish.

PEOPLELINK AMIGA

by Harv Laser

RAMON/OFF ★★★★★

author unknown

Executable file size: 2804 bytes

Library #4, file #6027

Some older Amiga software will not work with expansion memory above 512K. RAMON/OFF simply forces your Amiga to ignore your external FAST Ram board and use only the internal 512K of Chip memory. Run the program once to "turn off" expansion memory. Run it again to turn the expansion memory back on. Tested extensively with my own 2-megabyte Starboard2, RAMON/OFF has performed its task flawlessly.

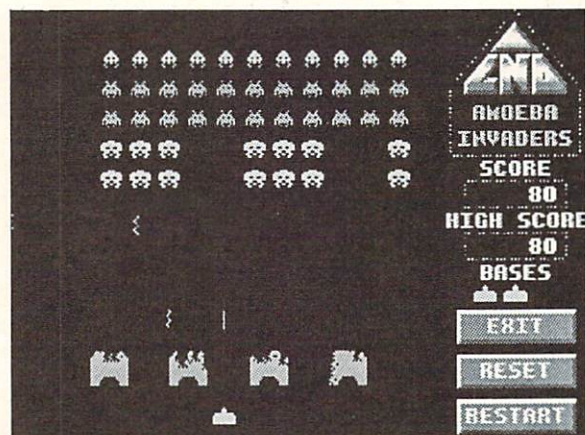
STEALMEMBOOT ★★★

by Alex Livshits

PAK filesize: 6144 bytes

Library #4, file #8939

Stealmemboot modifies the boot sectors of an Amiga floppy disk to insure that a program will load *only* into the first 512K of RAM known as *chip* memory. Some programs will not work properly with *fast* Ram. Unlike RAMON/OFF, which serves the same purpose, Stealmemboot is intended for those programs which *must* be run by inserting their disk in your internal drive and rebooting on them, such as certain older games or slideshow disks. Before actually using Stealmemboot to modify a disk, however, it would be extremely wise to use a disk sector editor to check the boot-blocks of the targeted disk to make sure you will not be overwriting important code that the program needs in order to properly run. I attempted to modify a working copy of Electronic Art's Arctic Fox game so that it would run properly



Amoeba Invaders screen.

with my expansion RAM - unfortunately, due to E/A's copy protection scheme, Stealmemboot destroyed some of the protection which was living on the boot sectors of the disk, and the game refused to load. Use this program with care, and if you're not sure what's on the boot blocks of a disk, the best advice is to leave it alone.

KEEP (version 1.1) ★★★★★

by Tim Grantham
(PLINK ID: AMTAG)
ARC file size: 20096 bytes
library #8, file# 8936

KEEP is a filtering or processing program with which to review those large online message-base capture files, and KEEP individual notices to a separate disk file. KEEP is very fast, and works almost entirely with the mouse. Depending on which service you've told KEEP your buffered file originated from, it looks for a repeating phrase or word at the beginning of each notice, which is then displayed with the KEEP or DUMP gadgets activated. The entire notice is onscreen, not just its header, so KEEP is not only a message filter, but can be used as

a text reader as well. After plowing through the notices with the mouse, those that you have flagged to be kept will be written to a separate file - the original buffer-captured file is not disturbed, and the new file can be recognized by its filename extension of ".kpt". I use KEEP every day to sift through the megabytes of articles posted to Usenet, KEEPing especially interesting ones to a file, or separating out long source code postings. KEEP is an invaluable tool for network addicts who need to filter out the gems from the junk, and do it quickly.

AMOEBIA INVADERS ★★★★★

by Chris Halsall and Ewan Edwards
(PLINK: E-SQUARED)
ARC file size: 64896 bytes
Library #10, file #8876

AMOEBIA INVADERS is an exact lookalike to the coin-op arcade game *Space Invaders*. It multitasks, it has great color, action, and digitized sound effects. You can play with either a joystick or the keyboard, and you can re-define which keys are used for game play. The game can be paused, restarted, or exited at any time during play. The developers of AMOEBIA INVADERS were diligent and thorough in perfectly simulating the original arcade game down to every last detail short of forcing you to put quarters into a slot! Higher levels get faster. High scores get you bonus features. This is as solid a public domain arcade game as I've ever seen. First class all the way, and great fun.

PAK ★★★★★

by Mark Riley (PLINK ID: SONIX)
download size: 7168 bytes (in PAK format)
library #4, file #8896

PAK is an Amiga file compressor/archiver/librarian with some major differences from ARC, ZOO, and others. PAK is the first program of its kind written specifically for the Amiga. Written in assembler, PAK is tiny: only 5K long. Multiple files, with long Amiga-style filenames can be PAKed together for speedier up & downloading on networks and BBSs. When downloaded, it is not necessary to run the PAKed file through a utility program to unPAK it: simply typing the name of the downloaded file at the CLI prompt will cause it to unPAK itself! PAKed files can also be examined, and their contents listed prior to or after unPAKing. Although PAK's compression scheme is not as powerful as ARC's, Riley intends future improvements to his program to get it to PAK down files even more tightly. The self-dissolving nature of PAKed files make this utility unique. This could be ARC's replacement.

GFXMEM version A.6 ★★★★★

Original program by Louis A. Marmakos
Converted to Assembly by Darrel Schnieder
ARC file size: 16768 bytes
library #4, file #7853

GFXMEM, one of the earliest Amiga programs in the public domain, was a graphical "gas gauge" showing how much RAM memory you had on your Amiga and how much was free or available. The program, when run, displayed itself in a moveable, sizeable window and would dynami-

cally resize the gauges depending on how you stretched or shrank its window. If you stretched the window out large enough, the gauges would be embellished with numbers indicating the memory usage rounded to the nearest Kilobyte. GFXMEM version A.6 does exactly what its ancestor did, except now the program is about one tenth the size of the original; another tribute to the power and speed of assembly language: it's only 1576 bytes long.

SNIPIT ★★★★★

by Scott Evernden
(a shareware program)
ARC file size 7040 bytes
Library #4, File #8377

SNIPIT lets you "snip" text from any console window to any other window using your mouse. For instance, you could snip text from your telecomm program's window into an ED window or the other way. You can even snip lines from your telecomm program's window and paste them back into the same window to send them back out your modem. SNIPIT works only with 8-point fonts and recognizes only ASCII characters 32 through 127, that is, "normal" text numbers, letters, punctuation, and capitals. It will substitute a question mark for text it does not recognize, and it works only in console windows. Another extremely useful little program to enhance your working environment.

NOKLICK ★★★★★

by Bryce Nesbitt
ARC file size: 3072 bytes
library #4, file #8126

NOKLICK rids the Amiga of one of its little annoyances: when an Amiga disk drive is empty, it makes a clicking sound every few seconds. NOKLICK is a "patch" program which modifies one bit on your KickStart disk, changing one instruction

which was telling the drive to step the read/write head between track 0 and track 1 waiting for a disk to be inserted. After NOKLICKing your version 1.2 KickStart disk, simply power off your Amiga, wait a few seconds, power it back on, and insert your newly patched KickStart disk. No more empty-drive clicking noise!

JOURNAL ★★★★★

by David P. Cervone
ARC file length: 43904 bytes
Library #4, file #7215

JOURNAL creates self-running Amiga demos. JOURNAL is like a recorder that captures in realtime all keystrokes, mouse movements, and mouseclicks that you perform, no matter if you're on your WorkBench, on a CLI window, or inside an application program. JOURNAL is accompanied by a companion program called PLAYBACK which is used to replay, in realtime, the JOURNAL script file. These programs let you create demos on your Amiga that can be uploaded or shared with other Amiga owners, who can then playback your demo and see all the keystrokes and mouse manipulations that you originally recorded. This program has tremendous application possibilities for ANY Amiga program which will permit multitasking. For example, you could use it to create lessons on doing special effects with Deluxe Paint or Sculpt 3D or Sonix that would simply take too long to explain in words. JOURNAL requires that the person who plays back the script is using the same software and screen configuration as the person who created the script. As JOURNAL's author mentions in his documentation, watching a playback is almost "spooky."

JEDIT ★★★★★

by Mike Scalora
ARC file length: 21504 bytes
Library #11, file #7349

JEDIT is a program that turns JOURNAL's binary format scripts into ASCII text so they may easily be modified, or even created from scratch using any text editor. It allows more flexibility and fine tuning of JOURNAL-created demos.

SETKEYDEMO ★★★★★

by Charles Carter
(PLINK: CJCARTER)
a demo of a commercial program.
ARC file size: 32128
Library #4, file #8142

Most of the time your 10 Function keys just do nothing. SETKEY is a commercial function-key program written and sold by Charles Carter; SETKEYDEMO is a full-featured version that permits you to play with the concept before you decide if you want to purchase the complete version. Using SETKEY, you could program one of your function keys to type out "DISKCOPY DF0: TO DF1:" or any other phrase or command you can think of. SETKEY lets you remap your entire keyboard, assigning up to eight different strings or commands to every key. This demo version will let you play with remapping your keys, but will not let you save the work.



ABOUT THE AUTHOR:

Harv Laser, CBM*HARV on People/Link, is the founder and Senior Chairman (sysop) of the AmigaZone Club, and has been an Amiga 1000 owner since the machine made its debut in October, 1985. With two degrees in Art and 15 years experience in the international freight field, Harv is now a full time sysop, writer, and Amiga consultant. He resides in the Los Angeles area.



WORLD OF COMMODORE SHOW

by Mark R. Brown

Toronto:

city of a half million people, the largest English-speaking city in Canada, Pearl of the Great White North. That's what it said in the tour book. It was the first week in December, and (as usual), Toronto was playing host to the annual World Of Commodore Show.

The WOC Show is held in Toronto's International Centre (which my spellchecker always wants to correct). It's a big place, and WOC fills up one hall. It may have been the preconditioning of seeing so many huge generic shows like CES, but WOC looked smaller than I had expected it to. As my feet told me later, though, it was still plenty big.

Just to set the mood for the buying public, right inside the gate was a big Christmas tree with piles of Commodore presents stacked underneath its branches. I had heard that WOC was a good "selling show". The whole first wall of booths belonged to Canadian retailers, and they were really moving the stuff. A steady stream of two-wheelers plied the aisles between the selling booths and the parking lot, most of them laden, it seemed, with Amiga 500 systems. There was also a lot of software pushed across the counters, and many items sold out fast. Most of the prices were shockers to us Americans, until we did the 75% conversion that turned \$40 Canadian into \$30 U.S.

THE EXHIBITORS

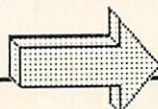
The first booth I hit was the new double-size booth belonging to **The Transactor**. The big news at Transactor was the launch of their new Amiga-only magazine, due out in January. The **Toronto Pet Users Group** (TPUG), still the largest Commodore users' group in the world, had two booths at the show, and they also sponsored many of the speakers. Some U.S. companies were represented by their Canadian distributors, but many had taken the time and trouble to send

staff from the U.S., a long, chilly trip for the Silicon Valley firms! In **Abacus Software's** booth, they were showing their new wordprocessor and database manager for the Amiga, *TextPro*, and *DataRetrieve*. Of news to GEOS users is Abacus' new *BeckerBASIC* (\$49.85), a BASIC programming language that runs under GEOS. It even lets you construct your own GEOS-like menus and dialog boxes. At the **Ahoy!** booth, I was introduced to the new Senior Editor Cleveland Blakemore. Cleve's just out of the service, and it took him a while before he'd quit calling me "sir". Though they weren't telling the general public at WOC, Mike Davila took me aside and told me about Ahoy!'s new Amiga-only magazine, *AmigaUser*, slated to debut in April. **Discovery Software** was showing *Arkanoid* to a continuous crowd of eager mouse-manipulators. They've got more products coming, and we are anxiously awaiting their shell program for the Amiga. **NewTek** was having a great time at WOC showing the *NewTek Demo Reel*, a dynamite 2-disk demo produced with NewTek products, and designed to sell, sell, sell Amiga systems for dealers. It's free for the copying, and many users groups now have it available. There were always at least 5 copies of the NewTek Demo Reel going full blast somewhere in the exhibit hall. **OXXI** announced that their *Modula-2* compiler is almost ready, and that they have taken over distribution of *A-Talk* from Felsina. **RTC Multilink**, a local Ontario company, was showing their *Multilink* educational networking system for the C64/C128. For very little cost, a school can use this system to share printers and a hard drive among a classroom full of students, and at the same time give the teacher full control over access and usage of the system. **Supra Corp.** was talking about their new 10 megabyte floppy drive for the Amiga, the *FD-10*. It should be available by the time you read this, and looks like it could be the under-\$1000 mass-storage solution "for the

rest of us". **The Disc Company** was selling a lot of copies of *KindWords* (\$99.95), their wordprocessor for the Amiga. It allows integration of graphics with text, and includes special SuperFonts for a denser, better-quality printout. **The Other Guys** were getting good crowd response from *Synthia*, their hot new Amiga music/instrument creation program. The folks at **Brown Boxes** were selling their 64K, \$129 battery-backed RAM cartridge for the C64/C128 to almost everyone who took the time to watch their demo. It gives you most of the advantages of Commodore's RAM expansion units, without the disadvantage of losing everything when you power down. There are 32K and 16K versions for those on tighter budgets, too. In the **Gold Disk** booth, there were exciting ongoing demonstrations of *ComicSetter* and *Professional Page* for the Amiga. *ComicSetter* is for the Stan Lee in all of us; it lets you produce your own full-color comics. Comics fan that I am, the debut of *Professional Page* overshadowed *ComicSetter*. I walked away from WOC with a copy of *Pro Page* and a manual, and the new look of this issue of INFO is the result of that single handful of stuff. As we become more proficient with the software (and as *Gold Disk* works out some of the bugs), look for INFO to look better and better. Our hats are off to Alexandra Peace and crew at *Gold Disk* for delivering unprecedented professional desktop publishing power to the Amiga community in *Professional Page*.

UNDER ONE FLAG

You could tell the folks in the **Phase 4 Distributors** area because the booths all looked the same and the carpeting was all one color. Other than that, most of the displays were manned with staff from the respective home offices of each company. **Complete Data Automation** (CDA) was pushing their *Graphics Transformer* for the C64, as well as Chris Zamara's





Fred Fish

intriguing *Moving Pictures* animation program, which they recently began distributing. They made the point of what a good combination the two of them made together (and I had to agree: they do). They were also showing *LexCheck*, which has become my spellchecker of choice for this issue of INFO, beating out the pokey built-in spellchecker in *WordPerfect*. **Hyper-tek/Silicon Springs'** latest news is the release of a commercial version of the highly successful PD Amiga program GOMF. *GOMF 2.0* (\$34.95), which stands for "Get Outta My Face" is a "guru buster". It intercepts guru meditation errors and lets you recover the Amiga without rebooting. The commercial version will intercept almost any error situation, and is configurable for 68000, 68010, and 68020 operation. **Infinity Software** was again showing *Shakespeare*, the color desktop publishing program for the Amiga. Though it wasn't quite ready to ship, it should be available by the time you read this. We also heard tell of an exciting new hardware project from Infinity due this summer or fall, but they won't talk about it yet. **Interactive Softworks** is venturing into the videogame market, with some top-secret titles under development. Their excellent color fontmaker, *Calligrapher*, has been sold to **Collins Associates Intl.** **New Horizons** announced major upgrades to *Flow* and *Prowrite* (see *INFO Update* for details). **RGB Video Creations** was exalting in the extremely positive reception they've

had to *Deluxe Help* for *Deluxe Paint II*. New *Deluxe Help* products are planned for *DigiPaint* and *Calligrapher*. **Vertex**, the folks who do the *AmNews* disk magazine for the Amiga, have some software titles coming soon. Among them is *Footman*, a two-player PacMan clone with 50 different mazes and a design-your-own-maze option. John Foust was manning his **Syndesis** booth, showing *Interchange* (\$49.95), a program that allows users of *Videoscape 3D* from Aegis and *Sculpt 3D* from Byte-by-Byte to exchange objects. The demo I saw went smoothly and quickly.

THE COMMODORE BOOTH

Commodore's booth took up an entire end of the exhibit hall. Gathered under their wings were a dozen companies. One impressive product was the *AWS-1000 Pairing Generator System* from **Airware Solutions Inc.** This high-end Amiga-based program is for the airlines industry, and assists in scheduling flight crews. The president of the company, Rick Sulpizio, told me they chose to develop the system on the Amiga because of its ability to address up to 8 megs of RAM--they sort pairings in RAM for speed, and IBMs and Macs just couldn't hack that much direct memory addressing. **Progressive Peripherals** occupied a station in the Commodore booth, and they were again demoing *Superbase Professional*. The promised shipping date is January 15, so you should be able to buy it by the time this issue hits the streets.

Commodore themselves were showing the new *A2300 Genlock* (no price yet, but in the range of \$240) card for A2000. Also, they demoed the *PVA (Professional Video Adapter)*, with 1/60 sec frame grab, 24 bitplanes, and genlock capability (May/June availability, about \$800). It will consist of a set of 2 boards, one in the video slot, one in a regular slot. Besides IFF file grabbing, it will also store a full video frame from the buffer to disk. The new *CBM PC-60* will be shipping in "early 88"; a

XENIX operating system is rumored to be under development for it. It will feature a 16 MHz 80386 cpu, EGA graphics, serial and parallel ports, 8 slots, one meg of RAM, and an optional 40/80 mbyte hard drive. The "unofficial" word from Commodore is that an 80386 version of the Bridge card is under development, based on the 386 PC design. (*Sigh*: and the 80286 version isn't even available in the U.S. yet...) I talked with Commodore engineer Fred Bowen about the problems with the 1581 drive. He says the troublesome 1770 Western Digital chip that was used in the first release models of the 1581 has been replaced with the 1772. Jumper J1 beside the controller needs to be always installed to prevent some minor operational problems in some units. He added that the long-awaited C128 RAMdisk software for the 1750 RAM expansion unit is now available for downloading from QLink and other online sources. *V1.2.1 of Workbench* is ready and will be available "soon". It allows booting from an external device like a hard drive. *V1.3*, which contains the hard disk fastdos that Dale Luck has been working on, will follow soon thereafter.

TALKS AND PARTIES

Both WOC and TPUG sponsored many speakers throughout the run of the show. Commodore spokespeople Gail Wellington, Pete Baczor, Dave Archambault, Fred Bowen, and others all took a turn at the mike, as did Jim Butterfield, Lou Sander, Steve Punter, and other industry luminaries. I caught a couple of minutes of Peter & Paul Hughes' talk on graphics, and sat in on Fred Fish's session; nice guys, all.

After the show it was back to the hotel and TPUG's hospitality suite, and a great time talking Commodore computing with Jim Butterfield, Jim Oldfield, Bob Baker, and the TPUG officers and rank & file, into the wee small hours of the morning. Many thanks to TPUG for making my stay in Toronto, the birthplace of Commodore, so pleasant.



CES REPORT

by Tom Malcom

The city where gauche has been elevated to an art form, that gloriously gaudily grandly glitzy Gomorrah of the West, Las Vegas, welcomed the Winter Consumer Electronics Show with frenzied abandon.

It was four below zero when I caught the plane for Vegas from Iowa and it was 55 when I landed. It felt like the tropics. I peeled off the winter layers and headed out to find some action. There was money and the promise of money everywhere. It was party time deluxe, spectacle on a scale that would have awed the Romans.

Unfortunately, the action at the show wasn't in the computer section. There were even fewer companies exhibiting computer-related products than did at the Chicago CES last spring. CSS and Soft-Kat both had a number of companies showing their wares under their respective roofs. A notable exception was Berkeley, which had erected a sleek two-story booth. The largest displays in the computer section were Nintendo and Sega, reflecting the renaissance in video games. A few other companies had their own booths.

Stuck off in West Hall, the computer section was pretty disappointing. The crowds were thick, but there just wasn't much to see. Cinemaware was running a videotape of their latest, including *King of Chicago*, *Rocket Ranger*, and *The Three Stooges*. They had Dave Knight, who does an eerily convincing Curly imitation, entertaining in the booth. (*Nyuk, nyuk, nyuk.*)

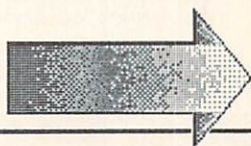
Phoenix was showing their hard drives, including the first to ship for the A500, their replacement power supplies, also including one for the

A500. The most interesting thing in their booth, though, was the prototype of a monitor stand for the A500. It's a shelf that hooks neatly onto the rear slot on the top of the 500, leaving space underneath for all those cords. **Keypunch** and their affiliate **Box Office** were in adjoining booths, showing their economy-minded lines of software. Box Office's titles are based on popular TV shows. Judging from the popularity of ALF on NBC, Box Office's C64 game version, which is just as rude as ALF himself, will probably be a best seller. **Accolade**, exhibiting at the Soft-Kat booth, was showing *Card Sharks* and *The Train*. *Card Sharks* lets you play hearts, blackjack, or poker with animated opponents, Margaret Thatcher, Ronald Reagan, and Mikhail Gorbachev among others. **Taito**, the Japanese company that produced *Arkanoid* for the arcades (Discovery Software recently released the Amiga version), is moving into the U.S. disk-based software market in a big way. They will be releasing the C64 version of *Arkanoid* in late April or early May and have plans to port a number of their arcade hits to Commodore machines. Taito VP Alan Fetter and his technical wizard, New Zealander Andrew Nobbs, have vowed not to release anything that isn't at least as good as the Amiga version of *Arkanoid*.

BUT WHERE'S ALL THE OTHER STUFF?

The newest of the new wasn't being shown at the Convention Center, but at suites in the hotels. **Cinemaware**, **Electronic Arts**, and **Mindscape** were all at the Alexis Park, which is well away from the Strip and very posh. Getting to the Alexis Park is a pain in the...er, it's a challenge. I finally managed to get a cab in front of the Riviera. The driver told me he was 74 years old and had been hackie in Vegas for 24 years. He proved it by driving up the sidewalk, albeit politely and slowly, to the corner, instead of trying to make a u-turn across the impossibly busy Las Vegas Boulevard. I didn't know whether to applaud or have a nervous breakdown.

The most entertaining new titles were at the Cinemaware suite. They were showing working versions of *Stooges* and *Rocket Ranger* for the Amiga, and a new super cartridge called *Warp Speed* for the C64/128. Since we're all Stooges fans at INFO, I was a little apprehensive about how well the flavor of our favorite idiots would translate. The worries were groundless. The graphics are, of course, as good as we've come to expect from Cinemaware, and what they have accomplished with graphics, they are now achieving in sound. When the Stooges speak, it is with the voices of Moe, Larry, and Curly. Sequences include such classics as "Paging Dr. Howard, paging Dr. Fine...", the boxing bit where Curly goes into a frenzy at the sound of "Pop Goes the Weasel", and a pie fight. It all hangs together to make *Stooges* the most fun from Cinemaware yet. *Rocket Ranger*, Cinemaware president Bob Jacob's pet project, is set in 1940 and pits the player against the Nazis in a tribute to movie serials. It also looks very good. It seems a little incongruous that Cinemaware would be coming out with a



... Consumer Electronics Show continued

super cartridge for the 8-bit machines, but they are. It is unique in that it will support two separate drives, be they 1541, 1571, 1581, or MSD in any combination. It even supports double side 1571 on the C64. And it's fast, up to 10 times faster than normal disk access.

Activision is growing even larger. They hosted a breakfast at the Desert Inn on Thursday morning, where they announced that they have taken over exclusive marketing of Firebird's products. Firebird won't be releasing any new products until the dust has settled, probably six months or more. Speaking of Firebird, they threw a party on Friday night at the Palace Station with entertainment by Steve Landesberg, best known as Sgt. Dietrich on *Barney Miller*. Microillusions' Jim Steinert demo'd *Photon Paint* for me, and it's the hot new multi-resolution/HAM drawing package. It will even let you wrap a brush around any shape you can dream up. Tom Snyder and Peter Reynolds of Tom Snyder productions delivered a highly entertaining demo of the new line of non-linear fiction they have developed in conjunction with Infocom, called *Infocomics*. (If they ever decide to get out of the software business, they could easily take their comedy act on the road.) Infocomics include comic book style graphics and no puzzles or arcade sequences. Instead, the story can be directed along different paths by the user, somewhat in the same vein as *Portal*. The neat trick here is that the point of view can also be changed. The user can see a scene from the point of view of one character, and then replay the scene again from the point of view of a different character. By using only wireframe graphics, four to five hours of story can be crammed onto a disk. At a suggested retail of only \$12.00, the price is right to sell mountains of them. The first three titles are *Lane Mastodon vs. the*

Blubbermen, *Gamma Force in Pit of a Thousand Screams*, and *Zorkquest: Assault on Egreth Castle*. Later on, I had a meeting with Tom Snyder, Peter Reynolds, and Jon Palace of Infocom. These guys were giving off sparks of creativity like a plasma generator. Tom Snyder has plans to develop children's titles for the Infocomics series, for parents to share in a sit-on-the-lap setting with their children. Also in de-



Graphic from Infocom news release.

velopment are more adult-oriented plots, the first of which will have a *Body Heat*-style theme. Infocom is so committed to Infocomics that they won't be releasing any more regular text adventures for the next six months. Infocom also has plans to release a fantasy-role-playing game by the end of the year.

Electronic Arts had a party Thursday evening to celebrate their fifth anniversary. Seems like they've been around a lot longer, doesn't it? They seem to have gone completely corporate and to have lost their sense of fun somewhere along the way. At their suite on Friday, they were showing *Deluxe PhotoLab*, kind of a combination of *Butcher*, *PixMate*, *DigiPaint*, and *DeluxePaint* that looks very slick. *DeluxeProductions* is an animation package for producing high-quality desktop video presentations. It's de-

signed for the professional market and operates in hi-res only. Even more interesting was the C64 desktop publishing package, *Paperclip Publisher*, which EA will distribute. It appears almost identical to the Amiga *Pagesetter*, is much faster than expected for something so complex on the 64, and looks like it will give Berkeley's *geoPublish* some serious competition. EA was very excited about *Interceptor* for the Amiga. It's a flight simulator with a plot, which seems to be the direction flight simulators are taking. EA has signed Michael Jordan and John Madden to design sports software. Lack of time prevented me from actually seeing other things they were working on, but a lot more stuff is coming, mostly from their Affiliated Labels.

Mindscape is being deserted in droves. Cinemaware, after being with Mindscape through several titles, is now going to market its own. After the Firebird party, I shared a cab with Tod Zipnick, CEO of Icom Simulations, who said that they are also going to market their own products from now on. Icom produced *Deja Vu*, *Uninvited*, and *Shadowgate*, all of which were released by Mindscape. Mindscape is producing new titles, most of which are arcade games. They are even producing cartridges for Nintendo. Their *Thunder Mountain* line of budget games is doing well, with several new titles.

Much as I would have liked to spend another day or two in Vegas seeing the rest of the new electronic toys, I don't think my poor abused feet would have taken it. I was also starting to have some serious problems with taste: the longer you stay in Vegas, the better it looks. I suspect they put something in the water to inhibit any sense of the tasteful. And wouldn't you just know it; the temperature was at a balmy minus two as I stepped off the plane back in Iowa. At least it was warmer than when I left.



AMIEXPO SHOW

by Mark R. Brown

AMIEXPO, LOS ANGELES Attendance at the LA version of AmiExpo did not match up to the 8,000+ who attended the original event in New York, perhaps because of the typhoon. Sunday's weather was said by many native Californians to have been the worst in 20 years.

There were lots of Amiga exhibitors, big and small. Conspicuous in their absence were Electronic Arts, Mimetics, Mindscape, Activision, and Commodore themselves, as well as several other "big names". Also missing was R.J. Mical, who cancelled out as the second day's keynote speaker too late to be removed from the printed programs.

INFO's booth at AmiExpo was the first time we had exhibited at a computer show since CES in Chicago a couple of years back. Tom and Mark had a great time pumping arms with lots of loyal INFO readers and looking at all the keen new Amiga stuff!

HARDWARE

In the hardware arena, one of the most exciting new products we saw was a 20 megabyte Bernoulli box (\$1795) from *Inner Connection*. With the Amiga's graphics, sound, and animation capabilities, hard drives are not going to provide enough mass storage. You need some sort of replaceable media, like the Bernoulli box (replacement 20 meg interchangeable cartridges are about \$99).

NewTek's Video Toaster (about \$799) was up and running some incredible multiple-image, rotating image, and other realtime effects with live color video of the show crowds. Lots of video freaks who knew nothing about computers were drooling over the Toaster's special effects capabilities.

CSA debuted their *Over 030* coprocessor board for the Amiga. This \$495 (unpopulated) board piggybacks on CSA's 68020 board and adds a

68030 processor and 68882 math coprocessor. These are still extremely costly items, which is why CSA supplies the board without the chips. No benchmarks are available yet, but this board will let an Amiga idle faster than a Mac II can go in overdrive.

Digital Creations is so proud of the specs on their new *SuperGen* genlock (\$749.95) that they had it hooked up to a vectorscope so the techie-types could appreciate its clean output. Needless to say, with that kind of confidence the video output looked pretty good, too.

On the "handy gadgets" side of things, *Brookfield Communications' NoRad dB60* monitor radiation shield is a fine grounded metal mesh screen that not only does a very nice job of reducing interlace flicker, but they claim it cuts down on CRT radiation, too.

SOFTWARE

In a suite upstairs, *Progressive Peripherals & Software* was again showing *SuperBase Professional* (\$299.95). The difference this time was that it is really, finally done, and PP&S promises it will ship within a few days of AmiExpo's closing. Their *FrameGrabber* (\$499.95) and *EXP-8000+* 8-meg internal memory card for the A500 are both looking real good, too, with availability announced for March.

We were also invited upstairs to see *Micro Systems Software's* new *Excellence!* wordprocessor. This under-\$300 color WYSIWYG wordprocessor features PostScript support, custom fonts, color output, hyphenation, real-time as-you-type spellchecking,

online thesaurus, full-page preview with simultaneous editing, and more. They've looked at all the Amiga, IBM, and Mac wordprocessors and put the best of them into this one, they say. Their goal is to make *Excellence!* a real "WordPerfect-Killer". What impressed us most was that they were actually asking the press, dealers, and users for their opinions before they finalized the product. What a concept!

Dr. T's was at AmiExpo with their new line of MIDI music sequencing, editing, and librarian software for the Amiga. *Dr. T's* is the most respected software developer in the electronic music world, and this move will have the same effect in the music world that *WordPerfect's* introduction had in the area of productivity--new respect for the Amiga.

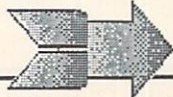
Publishing Partner (\$199.95) is the established desktop publishing package for the ST, and *Soft Logik* has ported it to the Amiga. The output looks good, and it has support for PostScript, HP laser, and 8-pin and 24-pin dot matrix printers, including color. Available in February.

Byte-by-Byte released the long-awaited *Animate 3D* (\$149.95) at AmiExpo. This package (which requires *Sculpt 3D*) provides *Sculpt* users with a graphical or text-script interface for producing raytraced animations without the hassles of generating each frame individually. The demos they were showing at the booth were fantastic.

RGB Video Creations is producing a plethora of new *Deluxe Help* titles. The latest is *Deluxe Help for Digi-Paint*, and one for *Calligrapher* is in the works. More are promised. It looks like *Deluxe Help* may end up an industry standard for online help, much like *IFF* is the standard for graphics.

Manx announced the release of v3.6 of their *Aztec C* compiler. Their *Source Level Debugger* (\$75) is also shipping now.

The *WordPerfect Library* for the Amiga adds a calendar, calculator,



datafile notebook, file manager, and program editor to the WP environment.

S. Anthony Studios was in the A-Squared booth providing PostScript graphics dumps of Live! digitized images. Their **LaserUp!** line of utilities provides direct PostScript file support to any PostScript laser printer for text formatting, IFF graphics printing, and even color separation.

Anco Software, makers of fine British games, is now in the U.S. They had **Las Vegas**, **Karting Grand Prix**, and **Grid Start** at the show.

We were also glad to see Chris Zamarra and Nick Sullivan of the Transactor at AmiExpo distributing copies of the first issue of **Amiga Transactor**. As you might expect, it's jam-packed with great programming and technical information.

THE LAST WORD

Despite the weather, it was a fun show, and a good time was had by all. It's a kick to attend a show that is devoted entirely to the Amiga, and we're eagerly awaiting the next AmiExpo in Chicago this July.



SHOW EXHIBITORS

Abacus
PO Box 7211
Grand Rapids, MI 49508
616-698-0330

Accolade
20813 Stevens Creek Blvd.
Cupertino, CA 95014
408-446-5757

Activision
2350 Bayshore Frontage Rd.
Mountain View, CA 94043
415-960-0410

Aegis
2210 Wilshire Blvd.
Santa Monica, CA 90403
213-392-9972

Ahoy!
45 W. 34th St., Suite 500
New York, NY 10001
212-239-0855

Airware Solutions
262, de Nantes
Laval, PQ H7G 2J8
Canada
514-696-0634

Box Office, Inc.
336 Robert St., Suite 1202
St. Paul, MN 55101

Brown Boxes
26 Concord Rd.
Bedford, MA 01730
617-275-0090

Byte by Byte
9442 Capitol of Texas Hwy.
Austin, TX 78759
512-343-4357

CAI
2092 Avenue of the Trees
Carlsbad, CA 92008
619-729-3968

Commodore
1200 Wilson Dr.
West Chester, PA 19380
215-432-9100

Complete Data Automation
201 S. Broadway
Yreka, CA 96097
916-842-3431

Computer Software Services
(CSS)
129 Sherman St.
Cambridge, MA 02140
617-876-2505

The Disc Company
3135 S. State St.
Ann Arbor, MI 48108
313-665-5540

Discovery Software
163 Conduit St.
Annapolis, MD 21401
301-268-9877

Electronic Arts
1820 Gateway Dr.
San Mateo, CA 94404
415-571-7171

Felsina Software
3175 S. Hoover St.
Los Angeles, CA 90007
213-669-1497

Firebird
see Activision

Gold Disk
2179 Dunwin Dr., #6
Mississauga, ON L5L 1X2
Canada
416-828-0913

Hypertek
120-1140 Austin Ave.
Coquitlam, BC V3K 3P2
Canada
604-939-8235

Icom Simulations
648 S. Wheeling Rd.
Wheeling, IL 60090
312-520-4440

Infinity Software
1144 65th St., Suite C
Emeryville, CA 94608
415-420-1551

Interactive Softworks
57 Post St., #811
San Francisco, CA 94104
415-956-2660

Infocom
125 Cambridge Park Dr.
Cambridge, MA 02140
617-492-1031

Keypunch Software
1221 Pioneer Bldg.
St. Paul, MN 55101
612-292-1490

Mindscape
3444 Dundee Rd.
Northbrook, IL 60062
312-480-7667

New Horizons
PO Box 43167
Austin, TX 78745
512-329-6215

NewTek
115 W. Crane
Topeka, KS 66603
913-354-9332

Nintendo
4820 150th Ave., NE
Redmond, WA 98052
206-882-2040

The Other Guys
55 N. Main St.,
Suite 301D
Logan, UT 84321
801-753-7620

Oxxi
3428 Falcon
Long Beach, CA 90807
714-999-6710

Phoenix Electronics
314 Court St.
Clay Center, KS 67432
913-632-2159

Progressive Peripherals
464 Kalamath St.
Denver, CO 80204
303-825-4144

RGB Video Creations
7144 Fisher St. SE
Calgary, AB T2H 0W5
403-252-0911

RTC Multi-Link
110 Riviera Dr., Suite 10
Unionville, ON L3R 5M1
Canada
416-479-6220

Soft-Kat
16130 Stagg St.
Van Nuys, CA 91406
818-781-5280

Supra
1133 Commercial Way SE
Albany, OR 97321
503-967-9075

Syndesis
20 West St.
Wilmington, MA 01887
617-657-5585

Taito
660 S. Wheeling Rd.
Wheeling, IL 60090
312-520-9280

Thunder Mountain
see Mindscape

TPUG
5300 Yonge St.
Toronto, ON M2N 5R2
416-733-2933

The Transactor
85 W. Wilmot St., Unit 10
Richmond Hill, ON L4B 1K7
Canada
416-764-5273

Vertex
7144 Fisher St. SE
Calgary, AB T2H 0W5
Canada
403-252-0911

LEO SCHWAB IS JUST HAVING FUN

an Interview by Mindy Skelton

You may have seen such Amiga screen hacks as "Robotroff" or "Marketroids" and wondered about what kind of a mind could produce them. Let me assure you that their creator Leo Schwab, a 23 year old "hacker-deluxe", is every bit as weird and wonderful as his hacks and animations. Schwab, a self-taught (OK, so he took one course in BASIC in the 6th grade!) computer whiz, produces his adroit bits of programming whimsy from his home in Marin County, California, (where else?) in between contract programming and "hacking" for UME Corp. (Ultimate Media Enterprises), a research and development firm.

INFO: When and how did you get involved with the Amiga?

Schwab: Once upon a time in 1985, the SIGGRAPH (Special Interest Group Graphics) Show was held in San Francisco. The show ran for three days, but Commodore didn't come until the second day. Even then all they had was two anonymous monitors running demos - no machine. I asked if I could see the machine. They said, "Not until tomorrow. The official unveiling is happening right now in New York." The next day I got there when the doors opened, and rushed to the Commodore booth. I was early, so there were only about 30 other people there. The Amiga was out, with a big projection screen. I played for a while and was impressed. They showed some demos I thought were cute, then they floored me with "Boing". I immediately asked how I could become a developer. In October of '85 I was approved, got my machine, and I've been playing with it ever since.

INFO: Do you have a favorite hack, or one that you're very proud of?

Schwab: I think I was most proud of "Robotroff" because I had the most fun

with it. I told people to just run it, without telling them what it did, and I kept getting calls and messages telling me what a deranged person I was. ("Robotroff", by the way, installs itself in the background and returns your CLI prompt so that it looks like nothing has happened. Later, when you are least expecting it, a small "Robotron™" robot walks onto your screen, chases your pointer, catches it, and pushes it off to the side of the screen.)

INFO: How do you feel about Amiga users calling display hacks "Schwabies"?

Schwab: The first I ever heard of the nickname was when someone took me aside and said, "Do you know people are calling these hacks "Schwabies"?" It took me by surprise. I just do this for fun. I like to share these neat little things with people. I don't know yet quite how I feel about calling them "Schwabies". I'm trying very hard not to let this go to my head. Once upon a time I used to be a very narcissistic individual, and that was destructive to my life. So I'm trying not to let "success" rule my life. I just want to be me.

INFO: Now for an abrupt segue. You always wear a cape in public appearances.. Why?

Schwab: There are several answers to that. One is, in the late 1980s there are two ways to look distinctive: one is to shave off eighty percent of your hair and stick a safety pin through your cheek, and the other is to wear a cape. I think the cape looks better. Another answer is that I have no distinguishing marks, and people can identify me by my cape.

INFO: How did you decide on a recumbent bicycle as your trademark?

Schwab: I fell in love with recumbent bikes (where you sit in a chair-like seat with a back and the pedals in front of you) because my only form of transportation was, and is, a bicycle, and regular bikes are pretty darn uncomfortable. I am so enthusiastic



photo by John Foust

Leo Schwab

about recumbents, that I made one part of my "signature" and hope people will ask me about them.

INFO: Have you ever been a pirate? Do you prefer being a display hacker?

Schwab: I was a pirate for about two weeks. Right after I bought my \$600 Commodore 64 someone came up to me with a copy of *LOGO* they couldn't copy, and asked me if I could make a copy of it for them. I said sure, disassembled it, found the code, and "no-op'ed" out the protection. Someone asked me if I could do that with *Multiplan*. I said "Sure", and started thinking to myself, "Hey! I'm pretty good at this!" Then I ran into a game called *Fort Apocalypse*. I said "Aha Ha Ha", wandered in, had no idea what they were doing and gave up right there. After that I was never an active participant in piracy. It just wasn't worth my time. I also frown on piracy because the people that are getting ripped off are my friends. I know the people who have done all these wonderful things. I'm coming at piracy from a different perspective. Since I plan on getting into the commercial game market soon, I imagine it will become an even more personal thing. On the other hand, display hacking enables me to be creative. It enables me to have fun with a machine I love, and lets other people have fun with it too. I'm certain a lot more people appreciate something pretty happening on their screen than appreciate a broken copy of *Dark Castle* or something; and besides, I have fun when other people have fun. Then there's the Amiga virus program. No one is at all pleased with this because it writes to the boot sector. There is a guy named Jim Sachs, who is working

on a game called *20000 Leagues Under the Sea* which has a custom boot sector that enables it to boot instantly. I mean half a second after you boot the disk, title screens are appearing and things are happening. But, the virus infected one of his disks, destroyed the custom boot, and finally trashed ALL of his working disks. I assume he can reconstruct, but the damage is pretty extensive. I like insidious things as well as the next guy, but I would NEVER do anything destructive. That's one of the reasons I'm proud of *Robotroff*. It's insidious and you can spring it on people, but you can kill it

dream about on rainy nights?" *"Dream"* starts on a rainy night, and there are reflections, haze, and ripples on the puddles. We go into a bike shop and see a little red unicycle which is having a dream about being in the circus. It's ridden by a completely inept clown who is juggling and dropping the balls. The unicycle keeps retrieving the balls and finally starts juggling by itself, completing his acts to thunderous applause. The unicycle then wakes up, sighs and goes back to his corner (there's more to it, but that's the gist of it). It was gorgeous! I was really impressed, went home and start-

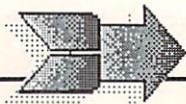
"...I'm proud of Robotroff. It's insidious and you can spring it on people, but you can kill it and it doesn't really hurt anything."

and it doesn't really hurt anything. Also, I can plaster my name all over my hacks, as well as include code for illustrative purposes. I can even include job appeals, from which, in fact, I got several offers.

INFO: Can you tell us about the "juggling" demo and your run-in with Pixar?

Schwab: O.K. Story mode. Back in July I saw a preview of Pixar's animation (due to premier at SIGGRAPH) called *"Red's Dream"*. It answered the burning question, "What do unicycles

ed thinking about how no one seems to take the Amiga very seriously. I said to myself "How could I lend instant credibility to Amiga at SIGGRAPH?" Then an arc lamp went on over my head. I had just been given a copy of *VideoScape 3D* and I said, "I'll do a juggling unicycle!" In the next three (18 hour) days I created a unicycle, had it juggle three balls and do lots of neat things (just like in *"Red's Dream"*), and had the camera flying around it. It was really pretty. By the second day of SIGGRAPH my film was being shown at the Commodore and Aegis booths (where they



added music). I noticed Pixar people wandering by looking dismayed. It occurred to me that they had probably worked as hard at their film as I had at mine (although they had certainly worked longer), and that their moment of triumph was being eclipsed. It's part of my personal code of honor to try at all costs not to hurt anyone's feelings. So I talked to the folks at Pixar, and when I got home I sent electronic mail to them apologizing and assuring them they I had only been trying to do something neat. They said everything was O.K. and not to worry. Being the person that I am, everything I do goes into the public domain. I was preparing to mail off disks to people, when I found a message in my electronic mail box saying that Pixar hoped I had no plans to distribute my animation, as that would be a clear copyright infringement, and could put someone in legal jeopardy (like me for instance). I scrambled to get back the copies I had already given out, and posted a message asking people not to distribute any copies they found. Legal minds concluded that my animation DID infringe on their copyrighted character and film, and Pixar refused to license it because they were worried about confusion between my work and theirs. I can no longer show or distribute the work but they did allow me to have one final showing at the September FAUG meeting. At that meeting I showed a new animation called *"The Dream Goes Berserk"* which WILL be public domain. This is an animation of the Amiga ball juggling three unicycles.

INFO: You recently won an award at

the Zeroth BADGE Killer Demo Contest with *"Marketroids"*. Tell us a little about your winning demo, and any new hacks you have under development.



A screen from Leo Schwab's animation *"The Dream Goes Berserk"*.

Schwab: *"Marketroids"* is a demo that has a lot of "in-jokes" about the Amiga. It parodies the video game *Robotron* and postulates that the "marketroids" at the competition set out to destroy Amiga. You, "an electronics engineering wizard" with "supercomputing powers" must save Amiga. This is probably meaningless unless you've spent time with the actual *Robotron*, but most Amiga users and all the people inside Amiga appreciated it. My latest animation was for the second anniversary of FAUG. It's an Amiga computer with a monitor on it and, spinning around it like a ghost entity is a rotating Amiga beach ball. That will be in public

domain as soon as I get around to ARCing it and sending it out. I do have plans, but my mind works kinda backwards. I listen to music and think of images to go along with it. There are animations I would love to do to particular pieces of music, but I can't find just the video equipment I need.

INFO: Do you plan to branch out from screen hacks and animations?

Schwab: I hope to enter the commercial game market, or sell my animation expertise to small businesses for TV advertising, because fame is nice, but money is OK too. A friend of mine says, "Send money not fame.", but I think fame is more fun than money, because I can make money doing anything. My ambition is to make

money doing what I enjoy doing.

INFO: Do you have any parting words of wisdom?

Schwab: There's a quote from Dr. Who that's appropriate, "Work for? I don't work FOR anybody. I'm just having fun." If I weren't having fun I'd go off and do something else. Any other motivation, you're really cheating yourself.



ABOUT THE AUTHOR:

Tokyo-born Mindy Skelton (who describes herself as "a normal All-American girl") has a degree in philosophy from Roanoke College. Her day job involves selling Amiga computers, and she runs a desktop publishing business on the side. She lives somewhere in Pennsylvania with an Apple Macintosh, a Tandy laptop, and three Commodore computers.

PART FOUR geos UPDATE

by Don Romero

In an age which has virtually everything one could want (at least for those whose minds are more or less content to accept what is available at the moment), necessity is usually the mother of purchase rather than invention. I now own a Commodore 128D - the purchase of which was made necessary by the arrival of Berkeley Softworks GEOS 128. Being able to use my trusty ol' 1541 as a second drive is something of a godsend, given all the GEOS disks I have to back up lately: GEOS128 (four sides), GeoPUBLISH (yeah!) and a fistful of stuff from Mystic Jim and associates (which unfortunately I won't be able to get to this time around.)

GEOS 128

GEOS 128 is an extension of GEOS 64 for the Commodore 128 in its native mode. It is an improvement primarily in that it supports most of the advanced hardware features which the Commodore 128 offers: more memory, an 80 column screen display, the faster 2Mhz CPU speed (in 80 column mode) and the faster burst mode I/O routines with the 1571 and 1581 disk drives.

GEOS 128 comes on two 'flippy' 1541 formatted disks. Side A of the first disk is the System Disk and side B is the QuantumLink terminal software. Side A of the second disk is a non-booting backup copy of the GEOS 128 System Disk and side B is where the applications GeoPaint and GeoWrite are stored.

DeskTop (v1.4) in GEOS 128 is written so that the 80 column display is virtually identical to the 40 column mode -- the icons are not scrunched up like on an Atari ST in hires mode and the user is still limited to eight directory entries per page and eight files in the border area. There is

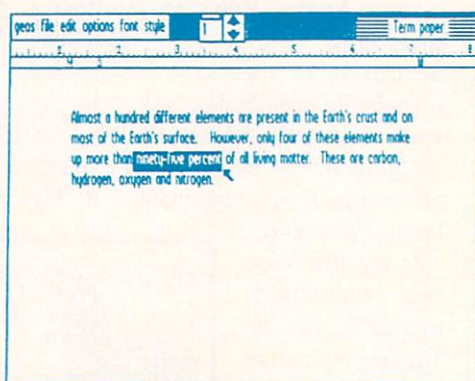
a new 80 column version of the standard BSW font, which is wider and enhances the illusion.

Somewhat as advertised, GEOS 128 will run most GEOS 64 applications. The exceptions (as noted in the manual) are GeoCalc, GeoFile and the Calculator. All of these use C-64 BASIC ROM routines, which apparently cannot be accessed exactly the same in the 128 mode as they are in the 64 mode.

Expansion memory-wise, a stock 1764 RAM expansion unit CANNOT be used on the Commodore 128: only the 128K 1700 REU (nearly useless with GEOS) and the 512K 1750 REU (highly recommended) work properly without modification.

VIVA 80 COLUMNS!

To some, no 'real' computer should be without an 80 column display. But most 80 column displays suffer from a distortion in aspect,



geoWrite in 80 column mode

which really becomes apparent with drawing and CAD programs - and graphic user interfaces.

This is NOT a peculiarity of GEOS or of the Commodore 128. Of all personal computers - Commodore, IBM

PC, Amiga, Atari ST, Apple II/+e/gs ad nauseum - only the Macintosh has been designed to provide a true 1:1 aspect ratio in its video display. Yet for what it's worth, the Mac's video is only 512 pixels wide, which is in effect only 64 text columns.

Even most 40-column video displays are slightly distorted. The distortion of an 80-column display is pronounced. 'True' circles and squares appear significantly taller than they are wide; and text fonts appear squished in the same way. With GEOS, the smaller point fonts are hard to read, especially for those who are trying to make do with a composite monitor and special cable. GEOS 128 compensates by providing a fatter version of the system font (BSW 128 9pt). But with wider fonts, printer output becomes an issue, because of the WYSIWYG nature of GEOS.

Another difficulty of the 80 column mode within GEOS is that there are no sprites available, and the cursors and pointers are the same color as the text. This takes a little getting used to within both GeoWrite and GeoPaint. Moreover, there is no provision within Preferences to alter the appearance of the pointer in the 80 column mode.

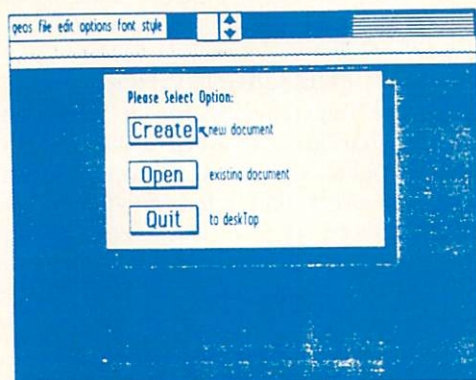
GeoWRITE 128

The good news in GeoWrite v1.4 is that 80 column display. One can now view and edit the entire width of the document without that nasty screen-flipping necessary with the 40-column mode.

Switching to the old BSW or Hearst 10 from FontPack 1 reveals the 'WYGIHTS' problem - *What You Get Is Hard To See*. I tried both the Amiga 1080 monitor and a monochrome greenscreen. The latter worked a little better, since it has a 40-

80 column switch which helped to alleviate the aspect ratio problem. Try setting your preferences for a dark

background and light foreground, since light pixels are visually 'fatter' than dark ones. It also makes it easy to rearrange wide sections of a graphic. I found the screen refreshes for the move and copy functions to be notably slower than other drawing routines in the 80-column mode. Moving large areas was irritatingly sluggish at times.



geoWrite

The version of GeoWrite that comes with GEOS 128 does not enjoy the advanced features from the GeoWrite 2.x series as some might have hoped for. Such is life, and BSW's right to decide. A 128 version of Writer's Workshop 128 will be a separate package and is to be released 'soon' as I write, and may already be available as you read.

GeoPAINT

GeoPaint 128 has virtually all the features of the 64 version, with the exception that it does not support color in the 80-column mode.

As a plus, the Tool Box (the control icons at the left side of the drawing area) can now be toggled off and on by the Wrench icon at the top of the screen. Toggling the Tool Box off expands the working area in both the 40 and 80 column modes.

Problems with distortion aside, the full 640 pixel display in 80-column mode is a real plus. For one, it's great for creating and copying full-page-wide photo scraps for pasting into GeoWrite and GeoPublish documents.

The original 128 comes with 16K of dedicated video RAM for the 80-column mode and can be expanded to 64K, which is standard on the 128D. GEOS 128 does not currently support the extra video RAM but possibly a future version will, which would take the sluggishness

out of these routines for those who have the extended video RAM.

GEOS 128 SUMMARY

I have not had an opportunity to use GEOS 128 with the 1750 REU, so I'm hoping for more pleasant surprises once I get my mitts on one. I found the speed of the 1571 to be more tolerable than that of the 1541 under GEOS 64, although booting GEOS 128 actually takes a little longer. For one thing, Desktop 1.4 (128 version) is a much larger program.

I only managed to crash GEOS 128 once: that from within GeoPaint, when I tried to print a document without the right printer driver on the disk. Even though 'CAN'T FIND PRINTER DRIVER' is still a standard error message in GEOS 128, GeoPaint decided to lock up rather than to issue it. I also had trouble booting GEOS 128 once after I had crashed something or other in the 128 mode and recovered using the reset switch. After switching the 128 off and back on, GEOS 128 booted with no trouble.

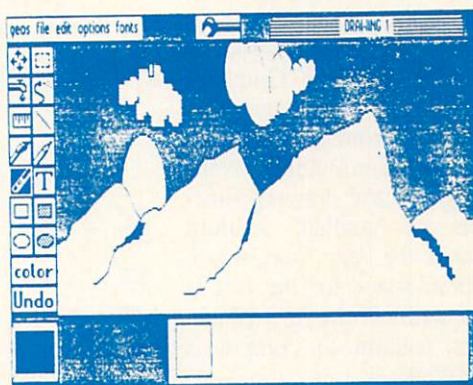
If you have a 128 and are already familiar and amicable with GEOS 64, I know that you will find GEOS 128 a worthwhile investment. For those 128 owners who are not already inclined toward GEOS, I would offer that GEOS 128 is one of the very few truly 128 programs to support ALL of the 128's hardware enhancements and accessories: 80 column screen, mouse, RAM expansion and the fast modes of the 1571 and 1581 disk drives.

GeoPublish

Is it LOVE or is it CONFUSION?

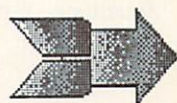
At first thought, GeoPublish is the program that all manner of practicing and would-be home publishers have been dreaming about for their Commodores for years. It's the first piece of C-64 software in a long time to have people actually knocking on my door to eyeball it.

But a first glance through the manual might give the impression that the learning curve for becoming proficient enough to print a single page with



geoPaint

GeoPublish will be frustratingly steep. Not that GeoPublish is poorly structured or that the documentation is unnecessarily obscure--it is probably the best GEOS documentation yet from BSW.



Rather, the problem is the raw power and the wide range of flexibility that GeoPublish offers. It is also the first true desktop publishing program available for the 64 and, like first anything, it will be somewhat alien. For example, I could tell you that GeoPublish supports kerning, user adjustable gutters, single pixel ratcheting and text rippling, but unless you are familiar with desktop publishing from another system, these things would not mean much without some further explanation.

GeoPublish is just not a fancy wordprocessor: it starts out about where most wordprocessors finish up. One should consider it as a replacement (and much more) for the printer support offered by word processors, which is very limited relative to what a desktop publishing program can do.

GeoPublish operates at three levels. First is the Master Page which sets the general outline or layout of the document, including automatic page numbering and a date function. The second level is the Page Graphics, where both bitmap graphics (imported from a Photo Manager) and GeoPublish's various geometric drawing functions are handled. A third level is the Page Text, where column space for the text is allocated and the flow of text from column to column is specified.

Naturally, GeoPublish supports multiple column printing of text, the importing of bitmap graphics from GeoPaint, and the intermixing and overlapping of both into an integrated page layout. But it offers more.

For example, with the special text functions, font sizes from 4 to 192

points can be generated from existing smaller fonts. These 'mega fonts' can be printed using GEOS' 32 different patterns; and special text can run either horizontally or vertically. (I was a little disappointed that upside down was not supported, though.)

GeoPublish also has a selection of drawing functions for creating 'simple' geometric graphics ranging from straight lines, circles, ovals, rectangles and squares to elaborate smooth arcs

other is a transparent mode which allow text and graphics to 'show through' one another as they overlap - nice for highlighting or enhancing special text.

The Other Shoe

The program has its limitations. What doesn't? But I found that GeoPublish was able to reproduce virtually everything I had previously been doing with GeoWrite, GeoPaint, scissors, gluesticks, border tape and whiteout without ever having to resort to the latter four items.

GeoPublish is a huge program and sections load into the 64's memory as needed. The manual states up front that the use of a RAM Expansion unit (REU) is recommended, and I certainly concur. I have the 256K 1764 REU configured as a second drive - and I found it impossible to load GeoPublish AND all the text and graphic files for an eight page newsletter AND a photo manager AND the four fonts I was using into REU at one time!

After the GeoFile fiasco, Berkeley Softworks put a lot of extra effort into getting the bugs out before they released GeoPublish. I was only bitten twice. GeoPublish crashed bigtime whenever I tried to use the Superb font from Font Pack I. And whenever I tried using the Elmwood font, my request was ignored, and another font would be inserted instead. I suspect other fonts may be problematic as well.

A second difficulty I encountered may not be a bug, but on a couple of pages, GeoPublish inexplicably began lapsing into the Twilight Zone for

within a cell. A special "title input" mode allows positioning text without planning for overlap from one cell to another; it's handled automatically. The contents of individual cells and blocks of cells can be colored.

There are the usual spreadsheet commands for placing, copying, and calculating values, such as Replicate, Sum, Average, maximum and Minimum, Next Page, Last Page, Delete, and Insert. There are additional commands such as If...Then...Else, Center, Left and Right (Justify), Sort, and recalling pre-defined text strings.

POWER PLAN has its own print function, designed to support the RS25/801, the RS26/802 and the Epson FX/80-80 equivalent printers. You may print out all of the worksheet, or only the portion you specify with beginning and ending cell locations. When the supplemental POWER GRAPH is called up from within POWER PLAN, a variety of graphic representations are possible. The data for the charts and graphs will be drawn directly from POWER PLAN worksheet cells that you select. Bar graphs, curve graphs (plotted points), line graphs (showing only ranges) and pie charts are all available. A Text Editor function allows labeling of the charts. A Window option allows placing up to eight graphs within windows on the screen at one time.

The POWER PLAN package includes one diskette, and a 200-page instruction manual in a book-sized loose leaf binder, a small Command Chart for quick reference, and a Function Key overlay for the C-64. A coupon is also included for ordering a backup disk for \$10.

POWER PLAN provides the functions of a full-featured spreadsheet and includes a variety of reports in addition to the usual alpha-numeric printed. It will require time to master completely, but it appears well worth the effort. POWER PLAN is widely available from retailers and discount houses, or can be ordered (\$50.00) directly from **ABACUS SOFTWARE**, PO BOX 728, Grand Rapids, MI 49501, (616) 241-5510.

[EDITOR'S NOTE: Borrowed from the November 1987 issue of *73IN/4X*, Commodore Houston Users Group. Edited for length.]

Using A 1571 With The 64

By Jay Matthews

Did you know that you can read and write to all 1328 blocks of a diskette using a 1571 disk drive with a Commodore 64? I didn't until Jay gave me a lesson or three. All you have to do is tell the 1571 that it is a 1571 and not a 1541. And that's easy - just type in this incantation after you power up:

```
OPEN15,0,15,"UD:HI" CLOSE15
```

The above will not give you the speed of the 1571 in the fast mode as you must have a C-128 for that, but from this point on the drive will realize that it is really a 1571, and will permit reading and writing of all 1328 blocks until you power off the C-64 or 1571, or tell it to be a 1541 again by typing in:

```
OPEN15,0,15,"UD:HO" CLOSE15
```

There is also a way that you can use both sides of the diskette as though they were both single-sided disks. To do this, you tell the 1571 that it is a 1541 by typing:

```
OPEN15,0,15,"UD:HO" CLOSE15
```

Next you select the side of the disk you want to read and write to using this side for Side 0:

```
OPEN15,0,15,"UD:HO" CLOSE15
```

Or this for Side 1:

```
OPEN15,0,15,"UD:HI" CLOSE15
```

The Bilingual Computerist
An Intro To CP/M
By Dave Mallon

What is CP/M? Is it a program, a language or an operating system? Unlike *INTEGRATOR*, which is a program, or *BASIC*, which is a programming language, CP/M is actually an operating system. It is a common operating system for Intel 8080, 8085 and Zilog Z-80 based microcomputers. Being an operating system, CP/M can support programs written in several different languages including BASIC, Assembler, COBOL and others. CP/M is the acronym

A page from Word Wrap created with GeoPublish

and irregular polygons.

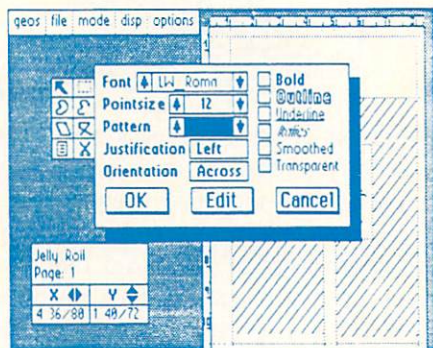
There are two powerful functions shared by both the special text and drawing functions: one is a smoothing routine for removing the jags from expanded fonts and diagonal lines; the

indeterminable lengths of time after updating the Page Graphics screen in the Zoom mode, but before displaying the Tool Box or returning mouse control; and again during dumps to the printer (about every ten lines or so). I was never able to get a fix on the problem: rebooting didn't solve the problem, and the errant pages were essentially identical to all the unaffected ones (simple text in Hearst 10pt with no bitmap graphics, very little special text and only a few straight line graphics.)

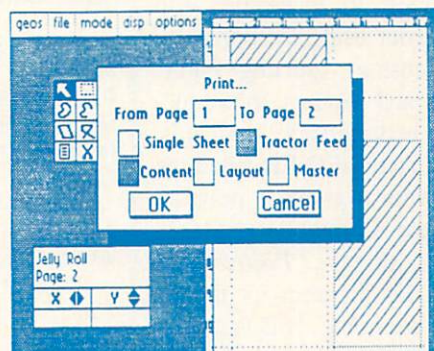
A Single GeoPublish document is limited to 16 pages. Multiple documents can be 'linked' via shared Mas-

Writer's Workshop. If you do not have GeoWrite v2.1, keeping copies of imported files is recommended.

I was disappointed that whole GeoPaint documents, such as the layout for the front page of my newsletter, cannot be imported into GeoPublish. Photo Scraps are a limitation because of the smallish editing windows in GeoPaint. There are sufficient tools within GeoPublish to facilitate the piecing together of a full GeoPaint document into a GeoPublish page, but it would be nice if the process were simpler.



geoPublish



geoPublish

GEOS; and that to get the most out of the program, a REU, a mouse and an 80-dot per inch (dpi) printer are also 'must haves' (although GeoPublish does directly support 60- and 72-dpi printers, too) Nonetheless, every serious 64 desktop publisher will want to make whatever investment is necessary to install GeoPublish at their fingertips.

Next time--Mystic Jim's GEOware, the updated geoFile, geoCalc, and more!

CONCLUSIONS

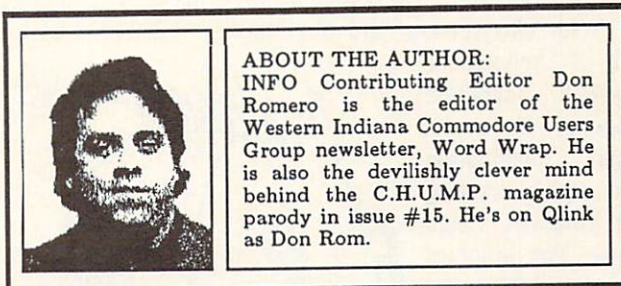
GeoPublish is a solid piece of work: powerful enough, especially with the promised extension of its laser printing capabilities, to produce professional looking documents as impressive as its own manual - or those 'killer' reports that you've seen in those Macintosh commercials. Some users will take advantage of GeoPublish's advanced features to retire their Print Shops and Printmasters; the Newsroom

ter Pages, but automatic page numbering fizzles at page 256.

Any GeoWrite v1.x or v2.0 file, or any Text Grabber-able file can be imported into GeoPublish; but imported files are automatically upgraded to a GeoWrite version 2.1 document and can subsequently only be edited with GeoPublish's built-in Editor or with GeoWrite v2.1, which is available from BSW to registered owners of

pales in comparison; and it will be interesting to see how well Timeworks' Publisher manages to hold it's own.

Keep in mind that GeoPublish requires



ABOUT THE AUTHOR:
INFO Contributing Editor Don Romero is the editor of the Western Indiana Commodore Users Group newsletter, Word Wrap. He is also the devilishly clever mind behind the C.H.U.M.P. magazine parody in issue #15. He's on Qlink as Don Rom.

WISH YOU WERE HERE....

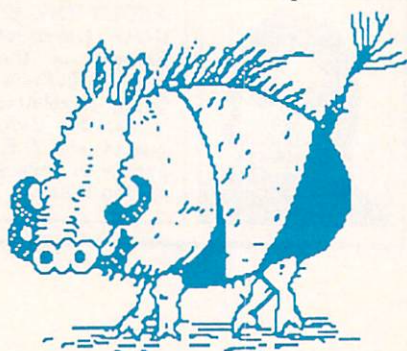
by Sue Albert

It's surprising it took so long to make the leap from using the computer for custom greeting cards, signs and banners, to producing personalized postcards. Now Activision has filled the slot with a graphics program for the Commodore 64/128 called simply... *Postcards*. I love this program for the utterly charming, "off the wall" artwork. The deceptively simple drawing style reflects the innocent eye and zany sense of humor of the talented artist Elizabeth Bryant.

Bryant has had five years of experience designing postcards and tee shirts from her Seattle business, Fusion Studios. This is her first encounter with computers and the result is pure fun. For the Postcards program she has created a Puckish universe that includes ten background scenes on earth and elsewhere, a bestiary of animals from land, sea, air, and the d-d-dark recesses of the mind. She has lampooned the famous and captured the silly side of ordinary folk. She then packs a pantry full of inspiring props to manipulate in improbable and amusing conjunctions.

PUTTING IT TOGETHER

With two screens and a toolbox full of keyboard or joystick operated options, you can let your imagination run amok creating all kinds of visual puns. The graphics in *Postcards* are presented in a clip art form similar to Newsroom. You



POSTCARDS \$24.95
Activision
P.O. Box 7287
Mountain View CA 94039
(415)960-0518

INFO-rated



Wild and zany graphics by Elizabeth Bryant and an unusually flexible program let you create postcards and other printed goodies with most popular printers. Includes a simple drawing program and materials for cards. Easy and fun to use. NOT copy protected. - S.A.

may copy and paste to and from each screen, and reload as many of the 20 clipart files on the disk as desired. You can load or save your completed designs, original graphics or text, and format a data disk. It is simple to manipulate graphic elements, and after a copy from one screen, a component may be pasted in three ways; overlaid as a solid label, made transparent so the background shows through, or masked, letting your object fit realistically into or onto the background. This lets you put a party hat on the Mona Lisa and even give her a glass of champagne or a flag in honor of a special occasion. You can copy and paste anything from the library files including the background scenes which can be easily combined like cartoon cells.

Graphic elements can be flipped from left to right or upside down but, sorry, no sideways. Placement of picture parts is made easy as the crosshairs and capture boxes stay in the same position from screen to screen. Any missed

alignments or interfering details can be erased pixel by pixel or in a partial or total wipe. One "undo" command will erase all actions during the last command, a second brings them back. If you really mess up, but don't want to start over, there is a simple drawing program built into the command menu with five pens, lines, zoom, and five fill patterns. Of course you may use these to create your own art: scenery, interiors and dialog bubbles

are on my list. It's easy to modify accessories, or even add new personnel to the motley crew.

You are given only one "Postcards-issue" keyboard font with upper and lowercase, three so-so clipart fonts, and a selection of phrases on the disk. This part of the program is disappointing after being teased with the examples on the packaging. Or if you have, as I do, an uncontrollable font "addiction". If you err when adding text over the picture, you can *instant delete* but the area under the text will vanish. Better to *undo* and start all over or to create text outside the card frame or on the second screen and paste it in place. In the Text mode I discovered some undocumented Commodore graphics which print oversized. They are accessed with the function keys or using CTRL/keyboard. These make nifty borders.

PUTTING IT DOWN

There are drivers for most popular printers or compatibles on the disk, and Postcards supports the major printer interfaces. The fine quality printouts are fairly fast. Pre-printed postcard backs on cardstock and a gluestick for adhering them to your printout are supplied. Files for a blank card with a rippled border and a card back are on the disk. This enables you to print the message and address and insert graphics on the card back. With colored stock or colored pens and pencils, you can add the rainbow to this black and white program. A light spray of artists fixative will set printer ink so it doesn't run. With a can of spray mount adhesive you can laminate your own backs and front designs onto blank 5x8 inch file cards and trim to size. I found spraying the adhesive on the thicker stock works best and I finish with another coat of clear fixative. (Take care. Use sprays in well ventilated areas.)

The Postcards graphic library files print out in half page size. Since you are free to manipulate and print the whole screen, or join two for a whole page, you could produce many things other than postcards. How about a comic strip or some stationery?

PUTTING IT OFF

Now we come to the inevitable complaint department. This is going to be hard to believe, but the manual (which covers versions for several computers) does not illustrate the graphics libraries on the disk. Instead you are given a card with a list of subjects and their file locations. I spent several hours loading and printing each file for reference and I find this a shocking omission. There is no index and there are no illustrations of the



work screens, but because the program is so easy to use and commands well explained, you shouldn't have difficulty understanding the program. There seems to be a regressive step recently by many companies in cost cutting by skimping on the essential manual, also known as "Cutting off the nose to spite..." etc.

I will give Activision the benefit of the doubt in not understanding just what Commodore graphic users want. A brief perusal on Q Link would answer that question. **WE WANT POWER! WE WANT FLEXIBILITY! WE HAVE AN INSATIABLE APPETITE FOR GRAPHICS AND FONTS!** We also **NEED** programs that allow graphics interchange between programs. Sharing only makes individual software programs more powerful and useful. Even without

copy protection, I could find no way to export the Postcard files into *Newsroom*, *GEOS*, *Flexidraw*, *Doodle* or any of my other graphics programs with my current conversion programs. Neither could I bring other fonts or graphics into Postcards. The graphics in Postcards are too lovable to live alone. Someone clever out there will find a "fix" and share it...but wouldn't it be great if software developers had the foresight to do the "fixing" for us, like they did on the Amiga with the IFF file format standard?

Though you can use two drives, a mouse driver and access to RAM Expansion would really let you fly. Activision has no plans at present for updating or for additional clipart disks. Good sales could make these decisions.

Activision does deserve a big round of applause and an "Atta-people" for it's new, enlightened, policy change. They have dropped copy protection on all their creativity and productivity software starting with Postcards. Hum baby...Way to go!

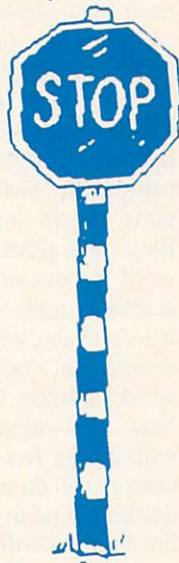
*Well...So Long!
Have fun!
Send me a card!*

Fusion Studios (cat
749 North 76th Str
Seattle, WA 98103



ABOUT THE AUTHOR:

Sue Albert is a completely right-brained artist, the combination of a gift C64 in '83, with EasyScript inspired this grandmother to write software reviews from the viewpoint of the total end user. Last year she self-published a book of poetry and computer drawings. You can EMail her on QLink as Suzart.



Graphics from
Postcards



THOUGHTFORM

By Donald Maxwell

First there was the typewriter. Then came the word processor. And next--some people say--will be the thought processor. Right now, however, there's an intermediate step often called the "outline processor"--something more than a writing tool but less than a thinking tool. That's what *Thoughtform* is. It can't think for you, but it can help you reorganize and subordinate ideas and information.

What makes *Thoughtform* more useful than most other outline processors is that in addition to providing a semi-automatic way to organize and subordinate ideas and information, it also has the basic features of a word processor. That is, it helps you make outlines, and it lets you write straight text. Furthermore, these two functions are completely integrated. You don't have to do anything drastic or tricky to switch from one to the other--just move the cursor.

The word processor function of *Thoughtform* is called the *block* mode (for blocks of text). In it you can write paragraphs, make insertions and deletions, move text, save and retrieve files, and print, just as in a normal word processor. (Oddly, there's no search or replace function.) You enter text, and the word-wrap feature keeps everything looking neat, with no words broken at the end of a line. Now, that might seem perfectly normal at first. But few other outline processors can do it; most can only accept outline headings. Furthermore, each heading is confined to a single screen

Thoughtform \$35.00
Thoughtform Inc.
45828 Emerson St.
Hemet CA 92344
714-927-6144

INFO-rated



A flexible outline processor that accepts both headings and blocks of text. Has the basic features of a wordprocessor, plus the ability to subordinate ideas in outline form. The disk contains a separate program to convert outlines to files that can be read by a wordprocessor. Unprotected. DM

line and can contain only a limited number of characters. So, most other outline processors are not suitable for writing text while you're making an outline--which limits their usefulness drastically. This is true even of the *Outliner* section built into *Timeworks' Word Writer*, because it forces you to completely separate outlining from composing. (See the sidebar for more on the relationship between outlining and composing.)

Each line of text entered in the outline mode of *Thoughtform* is treated as a heading--an idea or fact that names a section or sub-section of what you're going to write. A heading can be up to 78 characters long, but if you enter more than 39 characters, the rest of the text scrolls off the screen to the left, and you have to use the cursor keys to get it back again. (When printed, however, a long header will be wrapped around like normal text.) You can see how different this is from the block mode, in which all of the text stays within the margins of the screen.

Every time you hit the RETURN key in the outline mode, *Thoughtform* automatically begins a new heading directly below the previous one and at the same level of importance. However,

you can promote or demote headings to higher or lower levels of importance by moving them to the right or left. Once you move a heading to the right of the heading above, it becomes subordinate to that heading. Then, when you hit RETURN again, the next heading will be at the same level as the one you just moved. There appears to be no practical limit to the number of levels of subordination *Thoughtform* can handle.

The word *outline* suggests Roman and Arabic numerals, and upper and lower case letters, as well as different levels of indentation. On the *Thoughtform* screen you see the indentations, all right, but instead of the letters and numbers you see + and - signs that indicate whether or not a heading has subordinates.

This is how most outline processors do it, by the way. The numbers and letters don't appear until the outline is printed or exported from the outline processor to a standard word processor. Unfortunately, *Thoughtform* supplies only Arabic numbers--no letters or Roman numbers. However, you get your choice of engineering notation (which has no indentations but indicates the level of subordination with decimal points--2.2.3, for example), or indentations with Arabic numbers only, or indentations with no numbers at all.

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COLLAPSING & EXPANDING

A long outline might contain so many headings and levels of subordination that you lose sight of the overall structure of it. Here's where *Thoughtform*, like most outliners, can be very helpful. It lets you collapse the outline so that only the most important headings

* We just received an update to *Thoughtform* (v1.82) at presstime. Author Steven Gollery tells us that he has fixed *Thoughtform's* tendency to crash while operating on large outlines. Anyone who owns a copy of *Thoughtform* can obtain the update free by writing the company.

are displayed compactly on the screen. With the subordinate information temporarily out of the outline, you can get a better grasp of the major ideas. You can collapse an entire outline at once, or you can collapse only a few sections. And you can collapse it at any level, so as to see the overall structure in whatever detail you wish. And, of course, you can reverse the process by expanding the outline to any level you want to see.

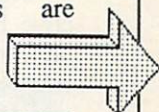
You can collapse an entire outline at once; but you have to expand it one heading at a time. In a long outline, that can be rather tedious, and so I wished several times for a way to expand the whole outline instantly.

MENUS

Thoughtform is menu-driven and therefore is relatively easy to learn. The menus are of the multi-level vari-

ety, often requiring you to descend three levels to find the function you want. (Somehow, this seems more appropriate in an outliner than in a conventional wordprocessor.) There is also a command method for selecting functions, so you don't have to use the menus if you don't want to. One of the menu selections contains HELP information sufficient to make the manual unnecessary for most problems.

The menus themselves are



THOUGHTS ON FORM

Who hasn't had at least one English teacher who required an outline for every composition? And who hasn't written the composition first and made the outline later?

Uh-huh. It's been that way in American schools for about eighty years, now. Just about every so-called writing textbook written in this century has told us that an outline is essential in order to write well.

On the surface, that might seem like good advice. After all, we do want to write clearly and logically. But unfortunately, it's not good advice at all. It's an example of bad deductive reasoning—a nice-looking but untested theory foisted off on us as if it were a Law of Nature.

Before the early 1970's, almost nothing was known about how people write. Everybody just went by what they had been told or read in some textbook. Almost nobody ever looked to see what real writers actually do when they write. And nobody ever checked to see whether professional writers made outlines before writing something.

Recently, however, there have been dozens of serious, scientific research projects aimed at finding out how people write and how to help them write better. The results may surprise you.

It turns out that almost no professional writers make outlines of the sort that would satisfy their high school English teachers. The pros may jot down a few brief notes, to get their minds in gear or to keep from forgetting things that occur to them in the shower or in the middle of the night. But formal outlines? No. Not unless the piece of writing is going to be very long and very complex and very technical.

It also turns out that trying to make a formal outline before writing is utterly useless for about 25% of all people in the world. They tend to think holistically, and so outlining as a way of getting started stops them dead. They compose mainly by making connections, by jumping all around, by perceiving patterns. So they write best by getting everything out of their heads in any order they happen to think of it, skipping around in the manuscript, filling in here and there, as well as writing ahead at the bottom of it. Formal organization, for them, has to come last, not first.

Outlining tends to drastically inhibit the thinking of another 50% of all people. In fact, only about 25% of us are inherently predisposed to think linearly, as is necessary for logical outlining as preparation for writing. (One result of this is that very few people do really well in school, because it's linear thinking and verbal activities that schools emphasize.)

So can an outline processor help you to write better? It all depends on who you are and on what you're trying to write. If you're the linear-thinking sort of person, or if you need to write something very big and technical and logical, then maybe it will. Otherwise—well, I wouldn't worry about it.

P.S. You might like to know that I'm a college English teacher and a specialist in composition theory. I began writing the accompanying review of Thoughtform with Thoughtform itself. But I never got beyond the second level of subordination, and then only once. And right from the start I found myself using the block mode almost exclusively. That is, I would have done better to use my regular wordprocessor right from the start.

...Thoughtform continued

interesting and effective. The main menu slides in from the left, and the sub-menus appear as pop-up windows. All menus are active, meaning that you move a highlighted selection bar to the function you want and press RETURN to get it.

FILES

Thoughtform saves outlines as relative files. This has the advantage of allowing changes in a long outline to

re-typing them.

Another drawback is that REL files are somewhat less reliable than SEQ or PRG files, because if a REL file's links get messed up it may be impossible to retrieve some sectors from the disk. This is evidently enough of a problem that the Thoughtform disk contains a repair program which, according to the manual, will restore scrambled files.

So far, I haven't had to use the repair program; but I must have come close once, in the early stages of writing this review. With six or seven screens-full of outline and text in memory, I decided it was time to save the file again. (I had already saved it two times earlier in that writing session.) As Thoughtform was adding to the REL file, I suddenly saw an error message on the screen. Notify the programmer, it said. A fat lot of good that would do me if what I'd written had gotten scrambled! But then another message appeared, telling me to press any key. I did, and the drive went back to work and saved the file correctly that time.

ANOTHER PROBLEM

One other thing makes me nervous: The RUN/STOP-RESTORE combination drops you straight into BASIC. That's scary. The manual mentions a SYS address that will re-start the program--but it works only if you're using a C-128 or have a RESET button on your C-64. The point is, a hardware reset shouldn't be necessary at all. It's

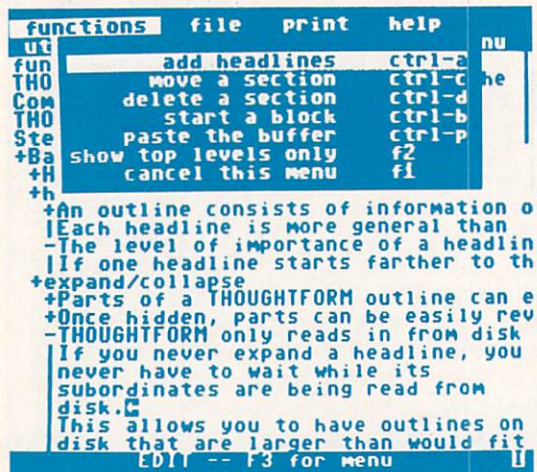
easy enough to disable the RUN/STOP-RESTORE combination so that a program won't die on you.

RECOMMENDATION

Because you can switch in and out of the block mode whenever you wish and edit anywhere at any time, Thoughtform allows you to write and outline simultaneously. This means that it gets in your way less than most other thought processors do.

Both the program and the 36 page manual are organized logically, in keeping with their intention to make logical organization easier for the writer. Thoughtform is well thought out, and--except for making me slightly anxious about unfound bugs--it works efficiently. It's also among the fastest of C-64 outline processors because it's written entirely in machine language, the REL files load and save quickly, and the program itself loads using Prism Software's SUPER-DOS, which is supplied on the Thoughtform disk. The program is not copy-protected, by the way, and is sold as user-distributed software, with instructions on how to become a registered user/distributor.

In general, Thoughtform is more flexible and easier to learn than other outliners I've tested. And although it certainly can't do any thinking for you, it can make it a lot easier for you to produce an organized outline of your ideas.



Thoughtform edit mode.

be saved quickly because only the changed sections need be re-written on the disk. Another advantage is that not all of an outline needs to be in the computer's memory at one time. The rest is stored on the disk and is called up piece by piece only when it's actually needed.

A drawback of REL files, however, is that they can't be read into a word processor the way SEQ or PRG files can. The Thoughtform solution to this is a separate export program that will convert an outline file to a SEQ or PRG file, so that it may be read by a wordprocessor. Unfortunately, you have to leave Thoughtform completely in order to use the export program. Also, there's no way to import an outline back into Thoughtform, so any changes made to it in a wordprocessor can't be used in Thoughtform without



ABOUT THE AUTHOR:

Don Maxwell has reviewed many word processors and other computer products in national magazines. He used to work as an electronics technician, but now he's sysop of the computer communication service at a college in Virginia, where he also teaches English. He and his family have lived in China, Nigeria, Spain and Mexico.



McGUFFY'S GRADER

by Dr. Elizabeth A. Kaspar

McGUFFY'S GRADER 64

Each year electronic gradebooks become more sophisticated, offering more useful features, and one of the best of the new ones is McGUFFY'S GRADER from Midwest Software. No mere keeper of grades, this program can print progress reports from one third to a page in length complete with comments, sort data in seven different ways, provide statistical analyses including mean, mode, median, and standard deviation, and also calculate and graph standard scores (z scores). The teacher has a choice of four of the most common, ready-to-use grading systems---percentages, for example---or if none of these is suitable, can edit any to fit her needs, using up to fifteen categories. The program will accommodate a maximum class roster of 98 students. If a class is larger than this, however, it is suggested in the manual that it can be divided alphabetically and the data from the two halves combined to get final averages.

The maximum number of total cells permissible, that is, the number of assignments multiplied by the number of students, is 3,000, certainly ample enough for all but the most overworked teacher! Unlike most electronic grade programs, this one will print progress and end-of-term reports for each student that can be customized with an assortment of grades and averages plus such options as absences, tardies and I.D. numbers. I.D. numbers are especially useful in protecting students' anonymity if grades are posted. For obtaining term averages, up to four marking period averages may be merged, and these may be weighted as may individual grades, and the final

McGUFFY'S GRADER 64 & 128
Midwest Software
Box 214
Farmington, Mm 48024
(313) 477-0897

One of the best gradebook programs, McGuffy's will handle up to 3000 grades for up to 98 students. Flexible entry, editing, and reporting, but could use some improvements in the manual and graphing functions. 128 version is almost identical to 64 version, but doubles the windows available to four. An excellent gradebook package with some room for improvement. EK

INFO-rated



the teacher wishes, it can be replaced later with the make up grade.

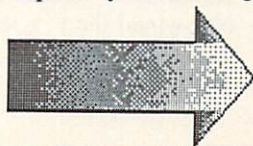
Particularly the readability of the printouts is outstanding, much better than those of most electronic gradebooks. A blank line is left either after every third name or between names starting with different letters, and brackets are printed between each grade---the next best thing to having a

printed grid.

IN THE BOX

McGUFFY'S GRADER comes with two disks (one a backup) and a 132 page, three-ring, vinyl manual. For those who wish to preview before buying (always an excellent idea), a three class demo is included on the disk. The actual grade program cannot be run, however, until a code number is typed in. This number is in an envelope which, if opened, prevents the return of the program.

The first chapter in the manual provides a quick overview for the impatient user, but this is a manual that will have to be studied because the program's many features make it rather complex, and the prompts on the screen are not always helpful or complete in the C64 version. Though the manual is well written, it is not easy to use because it is written for use with all of the major microcomputer brands; specific instructions for commands for each machine are listed only in the appendices. I suggest that the page of Commodore 64 instructions be photocopied and laminated for quick referral. In addition, you might wish to make up a step-by-step cheatsheet to use in the beginning. The lack of an index is an especially frustrating omission.



SOME SUGGESTIONS

There are some changes that would greatly improve user friendliness. Columns of grades in the spreadsheet, for example, are numbered; after several assignments have been recorded, it would be difficult to remember what each number represents. Information regarding any one set of scores can be viewed in a window at the top of the 64 screen when the cursor is on that column, but an overall view is needed. Why not a label for each column since three spaces would be sufficient for an abbreviation, such as, QZ1 or Ex1?

Another annoyance of the 64 program is the necessity of changing disks so often. Due to space limitations, this probably can't be helped. However, the lack of clear instructions can. The prompt, *Go to main menu*, should be followed by a reminder, *First put in program disk*. With two drives, of course, this problem would be eliminated.

Another help would be a validation feature to allay the user's anxiety. How else can a teacher be sure that the roster that took 30 minutes to type in was really saved?

The bar graphing option will graph only z scores. Grouped raw scores would be preferable because students like to see the graphs too, and they won't understand z scores. (And many teachers, I am sorry to say, may not either!) Furthermore, since the analyses includes z scores and standard deviations, why not provide the more useable T scores as well? Too many errors are possible with z scores since they must include pluses and minuses.

Both loading the program and individual class rosters were a slow process. The original program takes about 54 seconds to load, the edit data part another 50 seconds, and then 40 more seconds to load the data for a class of fifteen students. No doubt a class of 98 would take considerably longer still. Nor would the program work with the

Mach 64/128 fast loader. Also the original program will not load if the write-protect tab is on the disk, but the prompt, rather than saying this specifically, reports only a disk error. So it took a while of trial-and-error trouble shooting to figure out the problem since it was an unexpected one.

A bothersome feature of the manual is its sticky white vinyl cover that when laid down on a page of any kind of print bonds to it. Not only does the cover become unsightly, but then the print comes off on hands, clothes, other books, and most everything! Washing the cover with soap, alcohol, scrubbing powder, etc. helps not at all, and it continues to come off. Be careful where you place it!

In my gradebook, this program gets an over all A-. It's one of the best now available. User friendliness in the C64 version though gets only a C+, because it will take time to learn, and teachers (people?), I've discovered from my computer classes, don't like to study manuals, even well written ones. More helpful prompts especially and/or a tutorial program would be great additions. McGUFFY's GRADER is well worth the effort to learn, however, and will save teachers much time in the long run.

McGUFFY'S GRADER 128

McGUFFY'S GRADER for the C128 has two major improvements over the 64 version, making it much more user friendly and also faster to use. Rather than the 64's limit of two windows per screen, the 128 version has as many as four, so that a variety of kinds of information may be viewed at one time. The prompts, too, are more helpful in

aiding the user's moving from one window to another. It was not necessary to continually look up information in the manual as it was in the C64 program. In addition, all sections load more rapidly than in the 64 one, usually between 12 to 18 seconds, though the *Mach 64/128* does not work with this version either. The C128 version also uses the same manual as all the other versions; so again, I suggest that the user photocopy the page of 128 instructions in the appendices to use as a quick reference sheet.

In most other ways, too, the 128 program duplicates the 64 one. The class size limit remains the same, 98, and the maximum number of cells, obtained by multiplying the maximum number of assignments times the maximum roster number, remains 3000. Neither are there any added options to the program, such as more statistics, e.g., standard error, or more graphing capabilities. The spreadsheet still has the columns numbered rather than allowing labels for assignments. Thus the 128 program does not take maximum advantage of the C 128's added k; it obviously is the 64 version with the addition of more screen windows. Nonetheless, I still recommend it over the 64 version because both of its improvements are much needed ones that save great frustration. Overall, the program still rates an A-, not an A because I was disappointed that more options had not been added to this version. But my grade for user friendliness does go up from the 64's C+ to a B+ for the 128.



ABOUT THE AUTHOR:

Dr. Elizabeth A. Kaspar is professor of Educational Psychology in the College of Education at Western Illinois University where she teaches courses for teachers on using microcomputers in the classroom. She received a grant in 1982 to use PETs to conduct one of the first courses on educational computing in Illinois.



MINI CHIEF HARD DRIVE

by Mark R. Brown

You sit down at your C128 (or C64, it doesn't make any difference--this is just a fantasy sequence) and turn on your monitor, your computer, and then reach for the power switch on your 1571 drive. Only problem is, it doesn't have one. You feel around blindly on the back panel and find a cable leading behind the monitor, around a stack of computer books, and under a pile of twinkie wrappers to...the C128's metal-shielded power supply! There it is, sitting naked on the desktop. Some joker has removed it from your drive and stuck little rubber feet and the power switch on it. It doesn't look very pretty, but it looks like it might work. You contemplate what kind of a mind it took to play this bizarre trick on you as you flip the switch on. There's a whine like an F15's jets kicking in, and by the time you climb back down off the chandelier your 1571 is rattling and thumping like it's making mounds of julienne fries. Just what the heck is going on here?

Suddenly you remember: You traded in your 1571 on a shiny new *Mini Chief* hard drive.

Physically, the *Mini Chief* is a compact, clever little thing. The folks at *InConTrol* have taken the power supply out of a 1571 and performed the operation on it described in our little fantasy sequence. Inside the 1571 case, they have filled the resultant hole with a 20 meg 3.5" hard disk drive. That's right--in one 1571 drive case you've got a floppy disk and a 20 meg hard drive. It sells for \$795, and when you figure in the \$250 or so that a 1571 would have cost you in the first place, that means you're getting 20 megs of storage for \$550, or about 2 3/4¢ a K.

The *Mini Chief* comes equipped with two serial port connectors, and has recently been modified to include an IEEE-488 interface as well (at no

Mini Chief \$795
InConTrol
100 Sunset Blvd.
Chambersburg PA 17201
717-267-1879

INFO-rated

★★★★★

This compact unit incorporates a 1571 floppy and a 20 megabyte 3.5" hard drive in a single 1571 case. Includes serial and IEEE-488 interfaces, and a mode switch for selecting floppy/HD operation. Unique partitioning scheme results in good software compatibility. A good value. MB

extra charge!). There is a toggle switch on the front panel that is used in different modes of the drive's operation to switch back and forth from the floppy to the hard drive. There's also an integral fan, and in combination with the whirring and clicking of the hard drive there are a lot of sound effects, but nothing you can't live with.

Software compatibility is always the killer with C64/C128 hard drives, and *InConTrol* has taken a unique (if not always 100% successful) approach. The hard drive is partitioned into 120 areas the size of a normal 1541 disk. The operating system fools software into thinking it is operating on a "normal" 1541. It's a novel approach, and I found that it worked most of the time. Of course, some of the heavy-duty protection schemes weren't fooled, but there you're mainly talking about games, and I don't see any real advantage in storing your games on a hard drive.

If you want to access more data than a 1541 will hold, you can partition portions of the drive as "double-sided" 1571 format. Or you can invoke *InConTrol*'s special *chain* command to link from block to block and produce storage areas as large as you want. There are several new DOS commands implemented in the *Mini Chief* for control of chains and other aspects of HD operation. They can be

passed to the drive using *OPEN* commands, or under program or *DOS Wedge* control. The system takes a bit of getting used to, but it has resulted in what seems to be a much higher degree of software compatibility than I have seen in other 8-bit hard drives.

There are a lot of niceties to the *Mini Chief*'s operating system. There's a fastloader for C64 mode, a built-in copier, a multi-device-emulating CP/M mode, and lots more. The documentation on the unit we received isn't much, though it gets you going. We've been told that the docs are being reworked.

So who needs it? Well, how about BBS operators? Online storage is the critical limiting factor of a BBS. *InConTrol* recommends the *Color 64* and *C-NET* BBS systems, since they take advantage of the *Mini Chief*'s partitioning and chaining features. Users of large databases might want to check with *InConTrol*, too, to see if the *Mini Chief* is compatible with their database manager of choice. Program developers will also want to check it out. It has the capacity to keep all your code and tools in one fast, handy place. The *Mini Chief* is not for your average C64 or C128 owner, but those who need it will appreciate it.

There's a lot to this drive. It's a clever design from both a hardware and a software point of view.



DIGITAL SUPERPAK 2

by Karl T. Thurber, Jr.

Digital Solutions' *Digital Superpak 2* is a bundle of its three best-selling Commodore 64/128 productivity products, the *Pocket Writer 2* wordprocessor, *Pocket Filer 2* data manager, and *Pocket Planner 2* spreadsheet.

\$99.95 Digital Superpak 2 ****

\$59.95 Pocket Planner 2 ****

\$59.95 Pocket Filer 2 ***+

\$59.95 Pocket Writer 2 ****+

\$19.95 to upgrade any Paperback/Pocket series program to Version 2

Each is a completely separate, stand-alone package that also may be purchased individually for \$59.95. The three programs are furnished as copy-protected "flippies," with the C64 version on the front side and its C128 counterpart on the flip side. Previously I reviewed the package's centerpiece, *Pocket Writer 2*. Building on that review, in this issue I'll examine the *Filer* and *Planner* components. Remember that while I'll stress *Superpak*'s data exchange capabilities, each of its three components -- wordprocessor, data manager, and spreadsheet -- is an individual product that can be used separately either on the C64 or C128.

POCKET FILER 2 BASIC FEATURES

Pocket Filer 2 is a versatile data manager that does much more than produce Christmas card lists and prepare household inventories. It's a businesslike program that includes many of the features you would expect to find in a more expensive application. The program is divided into four main modules: the Create, Enter/Edit, Report, and File Utilities modules. Some of the more important features the four modules offer include the ability to

create database files with up to 2000 characters in up to 255 fields per record; record number limited only by available disk space; optional data encoding (scrambling); file protection with passwords to limit access to seven different functions (including the viewing, modifying, adding to, and printing of records); on-screen help;

numeric keypad and other C128 keys in 64 mode (when used on a C128), and it allows you to establish a configuration file to permanently set options. Serious users will appreciate the ability to sort records by up to nine criteria, and to save the indices associated with the sorts for later retrieval. The sorts can be accomplished either using

a one pass, high-speed method (which sacrifices some accuracy), or by a more accurate, but lower-speed sort.

You can design an unlimited number of custom reports using the Report Module. The program also provides for full-screen editing of screen layouts; formatting options including data alignment and setting dollar signs, commas, percentages, and decimal places; restoring a field or record should you enter

Pocket Filer 2 (C64)

sophisticated report generation and file utility capabilities; backup, restructuring, conversion, and merging of files; and commands similar to those in the other *Pocket* series programs. Alphanumeric, numeric, logical, date, and time fields are allowed.

Pocket Filer 2 also activates the

data incorrectly; various search options, including wild cards; batch deletion of files using matching search criteria; a calculator; a mathematical language capability in entering records and generating reports; arithmetic and trigonometric functions in reports; 16-digit computational accuracy; headers,

...Digital Superpak 2 continued

footers, and multiple-column labels; automatic index update as records are changed or added; and French or other language characters. The program permits relatively easy restructuring and merging of databases; in some other programs, these chores are very difficult to accomplish without reentering your data.

Pocket Filer 2 saves its files in sequential (SEQ) file format. While some of the more sophisticated Commodore data managers use the more exotic relative (REL) file format (which makes the rapid storing, retrieving, and sorting of files easier to accomplish), the SEQ format enables straightforward data exchange with other C64 and C128 data managers such as Superbase (tm), The Consultant (tm), and DataManager (tm), as well as with many wordprocessors. Pocket Filer can, in fact, work with three types of SEQ files: its own, Datafax, and Commodore sequential formats.

FEATURES FOR THE C128

Pocket Filer 2 harnesses the doubled memory and 80-column capability of the C128 to offer several enhancements. As with Pocket Writer 2, the program makes use of the 1700 (128K) and the 1750 (512K) RAM expansion modules. The modules, when assigned as device number 2, can provide more than 500 and 2000 blocks of storage, respectively. Their near-instantaneous accessibility allows especially rapid manipulation of large databases. Fortunately, no special programming skills are required to make use of the expansion modules. Another useful enhancement is a driver to allow use of the Commodore 1351

Digital Solutions, Inc.
30 Wertheim Court, Unit 2
Richmond Hill, Ontario
Canada, L4B 1B9
416-731-8775

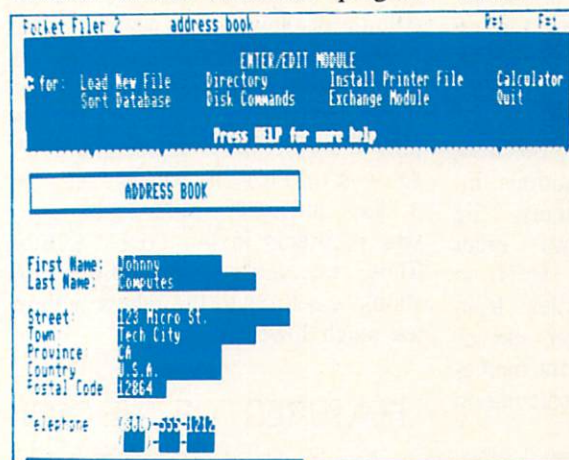
INFO-rated



Digital Superpak 2 is an excellent productivity bundle that, for under \$100, features powerful wordprocessing, data management, and spreadsheet software. Included in the package are Pocket Filer 2, an easy-to-use data management program, and Pocket Planner 2, a full-featured spreadsheet. The spreadsheet, especially, offers many powerful features that put it in the competition for "best of class" along with sister program Pocket Writer 2. The fact that both C64 and C128 versions are included is a strong plus should you upgrade your computer system. KTT

mouse. The mouse is plugged into joystick port 1, and allows you to activate the pull-down menus and special routines for accessing the disk drives, defining report and layout formats, and accomplishing other tasks. You can also use a joystick to emulate the mouse, as I did, though with less satisfactory results. Additional C128 mode features include automatic program

Also, the number of text characters per field is limited to 160, rather than the 255 that many data managers offer. Too, despite the extensive mathematical functions, there is no true programming language built into Pocket Filer 2; the most sophisticated data managers let you program them, using a special language, for custom applications.



Pocket Filer 2 (C128)

boot; true 80-column video display; a choice of 25 or 50 horizontal screen lines (the latter to allow you to see more of the current layout or record without scrolling); the ability to use a second disk drive for fast file restructuring and physical (actual on-disk record order) sort; and flexible drive

assignment for handling of extra drives.

LIMITATIONS

Pocket Filer 2 is a very competent data manager, though it is not in the same class as Superbase, considered by many to be the most sophisticated of Commodore data managers. As mentioned, Pocket Filer 2 makes use of slower-to-access SEQ, rather than REL, files.

Nevertheless, while the program is somewhat less of a "heavyweight" than its Writer or Planner companions, the data manager is one that can handle most of the data management chores that you could reasonably expect a C64 or C128 to tackle in home or small business use. And it does offer remarkable flexibility in custom-tailoring the database and report formats.

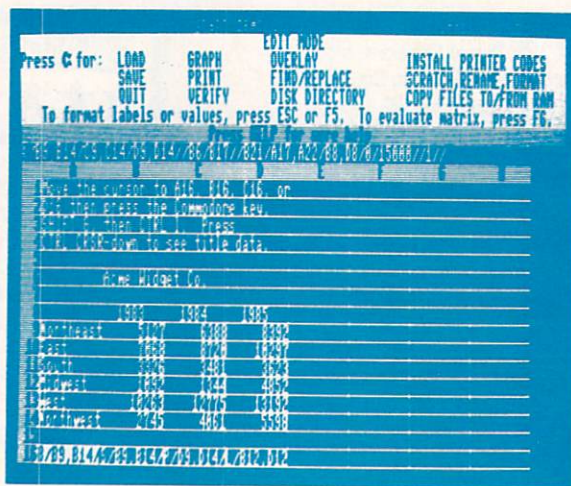
I find myself alternately praising and condemning the documentation. The Reference Guide is, at 96 pages, fairly well organized and professionally written, if rather cryptic. However, as with the other programs in the Pocket series, definitely lacking are sufficient manual- and disk-based tutorials and examples.

The program's many complex options and data exchange features really require some step-by-step, hands-on instruction from the gurus at Digital Solutions. You'll be handicapped in "getting up to speed" if you don't have some basic knowledge of databases, despite the online help.

POCKET PLANNER 2 BASIC FEATURES

Like its sister applications, Pocket Planner 2 offers many features that both push the C64 to its limits and also take good advantage of the C128. Its basic spreadsheet capabilities are formidable, and a host of nice-to-have extras have been included as standard in V2.0. The program features accuracy to 16 digits; up to 250-row by 250-column cell matrixes; a smart evaluation (intelligent order-of-calculation) feature to help ensure computational accuracy; a global formatting option; extensive cell formatting (including position, decimals, commas, dollars, and percent); horizontal and vertical windows; titles; column and row locks; cell protection; numerous mathematical functions, including "if...then" statements; file compatibility with several other spreadsheet programs; the option to dump the online help files from memory to allow for larger spreadsheets; and the ability to print mathematical formulas as well as calculation results.

Pocket Planner 2 also offers automatic evaluation to update the spreadsheet when new values are entered; a variety of easy-to-construct graphs (bar, stacked bar, line, and pie); manipulation of blocks or ranges for moving, copying, deleting, replicating, and updating cells; sorting (ordering) by number and letter; built-in sideways printing (an extra-cost add-on with many spreadsheets); automatic



Pocket Planner 2 (C128)

find-and-replace; French and other characters; and some useful wordprocessing features, including wordwrap. A novel feature is the 80-column option on the C64, in addition to the standard 40-column display -- great for working with wide spreadsheets. You can switch between 40 and 80-column displays on the same monitor, with no special hardware being required. (Of course, your monitor's resolution must be good enough to display the 80-column characters; a TV set won't do it.) The package also has a "look and feel" similar to the other two programs in the Pocket family. Thus, once you've mastered one, you should catch on to the others without too much difficulty.

FEATURES FOR THE C128

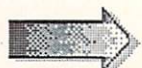
As with the other Digital Superpak 2 programs, Pocket Planner 2 moves into high gear on the C128. Some added features include the ability to depict X-Y graphs and use logarithmic scaling; mouse capability along with pull-down menus; burst loading with the 1571 disk drive; RAM disk option for systems sporting the Commodore 1700 or 1750 memory expander; flexible disk drive assignment; and display

of either 25 or 50 screen lines. If these features seem familiar, it's because many of them are also included in Pocket Writer 2 and Pocket Planner 2; I won't outline them again here. In addition, on the C128 you can even choose to have more than one spreadsheet loaded in memory at one time. This feature helps you to make fast comparisons between different spreadsheet files and move data between

them, without the need to repeatedly save and reload the files. Naturally, loading up the computer's memory with more than one spreadsheet slows down operations, and you'll soon bump against even the C128's memory limit.

LIMITATIONS

Digital Solutions deserves credit for designing a spreadsheet that is both powerful and relatively easy to use. Pocket Planner 2 should give some real competition to *Vizastar* (tm), considered by many to represent the best of the Commodore spreadsheets. I found little in the way of technical fault with Pocket Planner 2, except that in the C64 mode the program's many features cause it to bump up quickly against the machine's memory capacity. This limitation is readily apparent in the C64 version's 80-column mode, where only 3100 bytes are available for data; this restricts you to working with very small spreadsheets. (The C64's 40-column mode gives you about 12 Kbytes to work with, and you have a healthy 55 Kbytes on the C128). Too, while the Pocket Planner 2 Reference Guide is reasonably well structured, the program's many

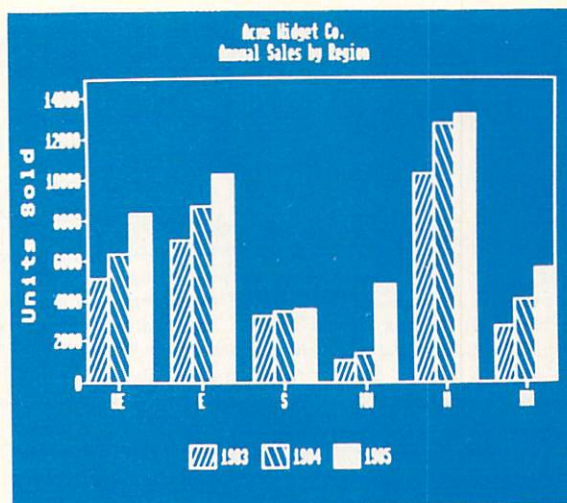


advanced features and complex options make the 84-page manual appear to be but a large "cheatsheet." The necessary facts are there, succinctly stated, but the beginner needs much more in the way of explanation, tutorials, and plain hand-holding. While the online help may be enough to get you through if you've worked with spreadsheets before, tutorials and examples -- either in the Reference Guide or on disk, or both -- are musts if you're to derive the most benefit from this otherwise excellent software package.

INTEGRATION?

As I indicated in my review of Pocket Writer 2, the three Superpak programs freely interchange data: all Pocket series software produce files usable with one another. You can merge data from Pocket Filer 2 into wordprocessing files using Pocket Writer 2's mail merge function; you can use this feature to print individualized form letters. Database files you build in Filer and other data managers that use sequential files can be loaded into Planner spreadsheets and used in calculations. And graphs, tables, and spreadsheets that you create in Pocket Planner 2 can be piped into Writer's wordprocessing files. Too, you can use printer files from any Pocket program with any other. The Digital Solutions programs represent an "integrating" process; however, the three programs are not truly "integrated software."

True integrated wordprocessing, data management, and spreadsheet packages are probably not practical for the C64 and C128, as they would require upwards of 256K RAM for all of the programs to be simultaneously resident in memory and still allow you to work with large files. Thus, while the data exchange features are important for some users, most folks are more concerned -- as I am -- with the capabilities and limitations of each program standing alone. It's on that basis



Bar graph from Pocket Planner 2 (C128)

that I performed my review, and I suggest that you compare C64 and C128 productivity packages first on their stand-alone strengths and weaknesses.

AT THE BOTTOM LINE

Both Filer and Planner have some minor limitations, as noted. Except for the heavy copy protection, which I consider an annoyance to the legitimate, serious user (though one which may adversely affect hard disk users), most of the limitations are but minor criticisms of otherwise excellent, well-designed programs. Indeed, Planner's graphing and sideways printing capabilities are especially impressive.

My biggest reservation about the Pocket series programs is that without adequate tutorials and walk-through examples, the programs' many features can easily daunt the user, as both the Reference Manuals and the help screens are quite cryptic in several areas. For my software dollar, the Digital Superpak 2 package is an excellent value, really a bargain

-- particularly if you want to cover your bases on both the C64 and the C128. Two of the three programs are at or near the top of their class: the Writer and Planner are especially clear winners. Taken together, for under \$100 the three-program package allows you to carry out practically any writing, editing, filing, analyzing, tracking, organizing, graphing, reporting, sorting, solving, calculating, or modifying chore.

Too, the fact that the programs operate similarly is a big plus in terms of learning convenience. In my view, Digital Solutions might consider doing four things "to make the best better": (1) provide several hands-on tutorials and more extensive sample files with the three Pocket products; (2) include the optional dictionary disk with Pocket Writer (see our previous INFO review); (3) beef up Pocket Filer's capabilities (it's a *good* data manager, just not a *great* one); and (4) find some "revenue protection alternative" to the onerous copy protection which represents a real annoyance to serious, legitimate users. If these steps are taken, Digital Superpak 2 could represent a program combo with no peer in the Commodore market.



ABOUT THE AUTHOR:

Karl T. Thurber, Jr. is a veteran of 22 years with the Air Force and is now pursuing fulltime graduate studies at Auburn University. Karl's been into writing electronics, computer, and amateur radio articles since the mid-1970s, and he now has more than 150 to his credit. He's a member of his local users group, the Montgomery Area Commodore Komputer Society (MACKS).

CITY DESK 1.1

DESKTOP PUBLISHING FOR THE AMIGA

by BOB LINDSTROM

Computerized desktop publishing will never replace the professional excitement of those old-fashioned sessions. White-collar cut-and-paste mouse-pushers can't appreciate the warm glow of magazine publishing commitment that comes from squinting over a glaring light table until 4 A.M.; the tension of seeing your vision blur during the tenth hour of scissor clicking; the surprise of reaching for that late-night candy bar and chomping a scrumptious mouthful of paste-up wax. Ah yes, that's real publishing! Desktop publishing for the Amiga threatens to banish those days of bloodshot eyeballs, burned and punctured fingers, and irreversible editing decisions. A lot of writers and editors will miss them. (At least we'll claim to miss them wherever journalists gather to swap locker room bluster.) The honest fact is, desktop publishing has taken a lot of the frustration out of page layout. But all is not lost.

PageSetter) combined with an efficient in-column editing capability, not quite as flexible as Publisher 1000 from Northeast.

THE BASICS

First, expect a solid user interface and good performance in the desktop publishing essentials. A series of pulldown menus, most with keyboard equivalents, and an icon "tree" (a la DeluxePaint) make City Desk fairly easy to use. It will run on a single-drive Amiga with as little as 512K RAM, although a second drive and one megabyte or more of RAM are desirable.

Dot-matrix printer output is as good as any Amiga publishing program. Laser printer support is included via a set of laser-compatible fonts. Text formatting options are acceptable and text flows into

CITY DESK 1.1



\$149.95

MicroSearch Inc.

9896 Southwest Fwy./nHouston, TX 77074/(713) 988-2818

City Desk 1.1 edges just ahead of the competition by making well-calculated compromises. Page layout is unusually labor-intensive but the situation is eased by a workable text-editor and the ability to alter layout at several levels of magnification. Includes laser fonts, custom dot-matrix fonts and a data disk library of clip art and sample documents. The best of the low to medium range publishing packages. -BL

that runs in 512K RAM. MicroSearch has chosen its compromises well. Nonetheless, there are disappointments in this most important feature of City Desk.

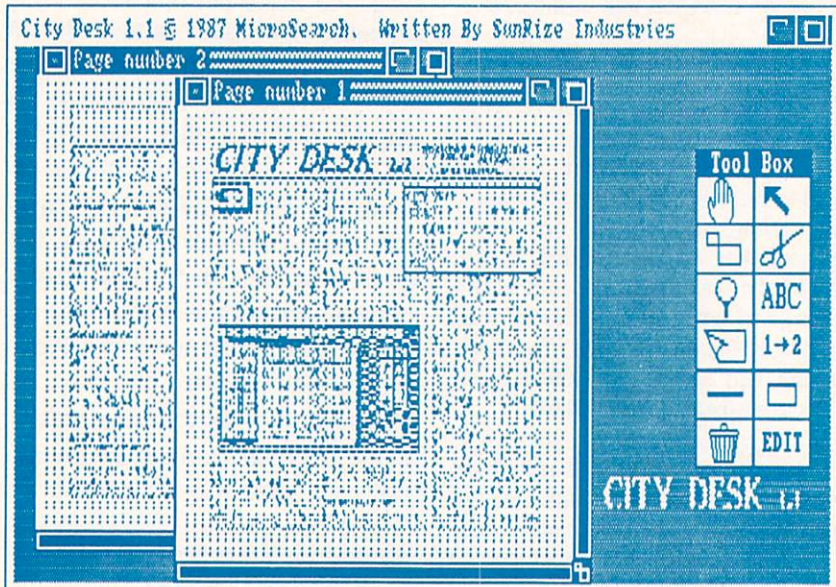
The Edit Page Format screen provides several fill-in boxes to establish the measures (in inches) of margins and column gutter (distance between columns), number of columns, and the presence or absence of lines between columns and around the entire page. City Desk draws the initial layout according to these numerical entries. Alterations to that basic layout take place when you automatically flow text around headlines, graphics, captions or other special purpose boxes that are created and positioned on the page.

As fast as this technique is, it also can be limiting. Suppose you want a three-column page with a large block at the top for a banner headline and graphic. Typically, you'll begin with the basic three-column page layout and fill those columns with text that City Desk will import from Amiga's notepad, ASCII files, Scribble!, or WordPerfect.

In the Headline Editor, you'll type the headline and position it on the page. Then, size the headline box to correct proportions. You may need to enlarge the headline font with an embedded text format command. Then, reflow the text so that the newly enlarged headline box won't cover the text. Dozens of mouse clicks and drags are involved in creating a single page.

Compare this to the more economical operation of PageSetter in which you draw text and graphic boxes on a blank page and then flow the text into that abstract page design.

As compensation, City Desk provides both medium and high-resolution screen displays in several levels of magnification. You can move and size boxes at any of those levels. This makes the labor-intensive layout process much easier than Publisher 1000, which provides only a non-editable preview mode to view full-page layouts. In City



Desktop publishing on the Amiga still has plenty of frustration for the publisher looking for page layout war stories. City Desk 1.1 from MicroSearch, like its competition in Amiga desktop publishing software, measures out equal amounts of victory and defeat. Compared to the competition, though, City Desk represents the most effective low-cost publishing package that I've seen yet for the Amiga. Overall, the program stands one step above its colleagues with a logical icon/pulldown menu interface (not unlike Gold Disk's

columns with good looking left/right justification.

In short, City Desk 1.1 will generate acceptable, even admirable, final results. Where it edges slightly ahead of the competition is in the path it takes toward those final results.

PUTTING IT ON THE PAGE

City Desk's distinctive style comes from its approach to page design. Compromises must dominate any desktop publishing software

NOTE: THIS REVIEW WAS ENTIRELY COMPOSED, SET, AND OUTPUT AS CAMERA-READY COPY USING CITY DESK AND THE H.P. LASERJET II.

Desk, large-scale design can take place on a full-page display and surgical operations can hone in on a single column.

The ability to design and save page templates to disk can minimize the complexity of text flowing and box juggling. After creating a library of page formats, you'll find yourself able to call up standard page designs and avoid the process entirely.

THE EDITORIAL PREROGATIVE

Eventually, you'll need to fix a typo or edit a text after you've flowed it into the page. For that purpose, City Desk's AVS Text Editor provides a single, scrollable text line. You can move forward and backward through this line to reach any point in a selected text. A word search option helps speed the location process. It doesn't offer the freedom of full-column editing in Publisher 1000 but it is superior to the off-line text editor in PageSetter. And City Desk completes each editing operation by reflowing the text automatically.

Some peculiar things can happen, though, when only part of a text file is flowed into a page or if a text chain isn't reconnected after reflowing around a graphic or headline. Occasionally in such situations, AVS will not search to the end of a reflowed text. I've even lost text after trying to locate a specific word in a document.

GRAPHICS HANDLING

City Desk can import any IFF-format graphics file in any resolution including interlaced resolutions. It will not import HAM pictures and trying to do so can crash the software. The program converts multi-color pictures into two color images upon loading. Still, the manual recommends executing all your clip art in two colors. So do I. City Desk's conversion routine is the worst of any Amiga desktop publishing program and often provides eccentric results [Eagle Tree's "BUTCHER" does a great job of conditioning graphics for City Desk.-Editors]. A simple built-in graphics editor permits you to draw your own clip art or edit existing files. The program is handy but elementary and is no substitute for, say, DeluxePaint 2.0.

MORE ECCENTRIC BEHAVIOR

Reflowing text around a picture can be a confusing process. If you cut a column in half with a graphic, City Desk may resist flowing the text to the bottom half of the column. Generally, it is necessary to disable Snap To Top, a feature to flow text from the top of a column regardless of where you position the cursor in the column. With

Snap To Top non-functional, text flows normally in the lower column.

The ability to choose medium or high-resolution display screens is a genuine benefit, particularly for the veteran Amiga user whose eyes have started jittering in sync with the flashing high-resolution screen. (It happens. I've found myself growing increasingly tolerant of hi-res flicker. How would you explain it?) The user freely can move from one resolution to another prior to a layout session. With a page in progress, though, moving from medium to high-resolution will crash the system, even with 2.5-megabytes of RAM. Grid Snap may not be disabled in some text blocks, regardless of what the pulldown menu claims. Clicking again in the window and repeating the disable selection generally resolves the problem.

**CITY DESK's
laser fonts carry
the program to
the next level of
output quality.**

The spiral-bound manual generally is helpful with a brief tutorial followed by a reference section describing most features. Despite the manual, some aspects of the program remain vague and the absence of an index makes its difficult to find specific program information.

BENEFICIAL EXTRAS

In addition to the program disk, MicroSearch includes a data disk with helpful extras for the City Desk program including a library of ready-made clip art, sample forms and documents, and libraries of specialized fonts.

City Desk's laser fonts carry the program to the next level of output quality. And for those interested only in top-quality dot-matrix

output, MicroSearch includes custom fonts optimized for dot-matrix printers. However, MicroSearch recommends that these memory-hungry fonts not be used on Amigas with less than one megabyte RAM. Also on the data disk is a print spooling program that is small enough (90K) for multi-tasking with some other programs.

THE BOTTOM LINE

Though not yet a professional desktop publishing tool, City Desk 1.1 is a low-cost and well-planned software design that handsomely will fulfill the needs of many users. Though limited in many ways, City Desk intelligently balances its compromises in a program that is quick to learn and relatively easy to use. Though far from the best of all possible worlds, City Desk 1.1 takes pride of place in the currently small world of Amiga desktop publishing.



Though Bob found much to criticize, and rightly so, we believe City Desk will be the desktop publishing package of choice for most Amiga users because of its reasonable price and its remarkable capabilities, including excellent HP laser output.

-Mark & Benn



ABOUT THE AUTHOR:

After spending years as a classical music critic for a Major Metropolitan Newspaper, Bob Lindstrom became a free-lance writer in the computer and music fields. His credits include regular columns in the highly respected Apple magazine A+, and in some Scandinavian Commodore magazine whose name I can't spell or pronounce.

PROFESSIONAL PAGE

We produced the majority of this issue using *Professional Page* and a *QMS PS-810* laser printer. The combination is a real desktop publishing powerhouse that puts professional power in the hands of the (fairly well-heeled) masses.

At \$395, *Professional Page* is the best bargain of the two (the *PS-810* is \$5495). For that price you get a desktop publishing package that begins about where most of the others leave off. *Pro Page* is a *PostScript*-specific publishing package. It won't work with a non-*PostScript* laser printer or with a dot-matrix printer. Because it is able to count on *PostScript*'s extremely flexible capabilities, *Professional Page* gives you an incredible amount of control over printed documents. If it

in sizes scalable in 1-point increments from one point to 127 point. You can also adjust the leading (that's "leading", or spacing between lines), the kerning (spacing between letters), justification, and font characteristics (**bold**, *italic*, outlined, underlined, or combinations.) You can switch auto-hyphenation on or off, and there's a user-definable exception dictionary to supplement the hyphenation algorithms. (Hyphenation usually works quite well, but when we were laying out

Don Romero's column we discovered that the algorithm had a tendency to hyphenate "GEOanything" between the "E" and the "O".) You can edit text on-screen, but you'll

HelveticaN: **Bold**, *Italic*, Outlined, Underlined, All
ZapfChancery: **Bold**, *Italic*, Outlined, Underlined, All
Roman: **Bold**, *Italic*, Outlined, Underlined, All
Helvetica: **Bold**, *Italic*, Outlined, Underlined, All
Palatino: **Bold**, *Italic*, Outlined, Underlined, All

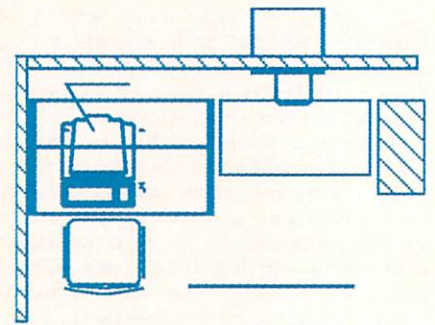
had to compromise to allow for less powerful printers (as other desktop publishing programs must), it wouldn't be able to do half of what it does.

What does it do? Well, you can start with scalable fonts. All of the fonts available in your printer are available in your document,

probably want to compose it using your favorite wordprocessor first. No problem, because *Pro Page* will import files from just about any Amiga wordprocessor. We did find that not all of a file's attributes make it into *Professional Page* when you im-

port a file--our *WordPerfect* files retain most font characteristics, but justification attributes are controlled from within *Pro Page*.

Professional Page does a fine job importing graphics, too. It does nice gray-scale conversions of just about any IFF graphic it imports. Of course, you've got all the standard cropping and sizing tools you need to make them fit right, too. With the *Professional Color Separator* module (\$195) due out soon, you'll be able to handle four-color separations, too.



Drawing from Aegis Draw Plus file.

Just about any tool you need is close by. The mouse gets used a lot when you lay out a page. The final release has keyboard equivalents for most of the common operations, but the *Toolbox* gets its share of use, too.

Of course, you can draw lines, boxes, curves, and even freehand draw on your page, and *Pro Page* can even import object-oriented drawings like *Aegis Draw Plus* files.

Professional Page works quick, it

24 50 75 100 127

is intuitive, it's powerful, and it produces fantastic finished output. But, of course, we have some complaints.

First of all, it's still buggy. Even the release version has a tendency to crash occasionally. We are confident that the bugs will be worked out, and even with the occasional crashes it still lets us do a much better job in less time.

Pro Page provides no way to escape from some long-winded process once you start it. There should be an "escape" from every process in the package, just in case. You also can't undo anything with a simple mouseclick like you can in many Amiga programs. Though you can usually fix a goof pretty quickly, an undo function would be a real boon. And there are a couple of unimple-

Professional Page \$395
Gold Disk
PO Box 789
Mississauga Ont Canada L5M 2C2
416-828-0913

A truly professional desktop publishing package for use with PostScript laser printers and Linotronic typesetting equipment. Provides full control over PostScript fonts, scaling, etc. Imports text from popular wordprocessors, and provides excellent text and graphics manipulation tools. Still a bit buggy, and in need of undo and escape features, but one of the most powerful software packages yet created for the Amiga. MB

INFO-rated



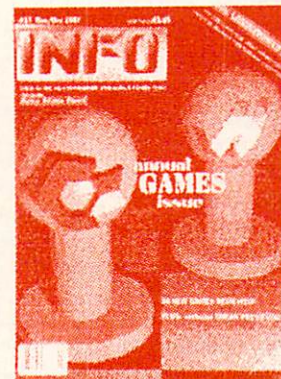
around graphic boxes. To justify text up against an irregular image, you must define myriads of tiny empty boxes that coincide with the outline of your image. (See our review of *Postcards* in this issue for an example.) True text flow around irregular objects is a very sophisticated feature that is just now becoming available in the most expensive Macintosh

desktop publishing packages. *Pro Page* doesn't have it, and it's too bad that the literature is misleading.

menting keyboard equivalents that made it onto the quick reference card, and we hope that they'll make it into the program soon.

I also have a problem with a phrase in Gold Disk's promotional literature. It says "*Irregularly shaped graphics are no problem. Text can be made to flow right around them.*" Well, irregularly shaped graphics are a problem. *Professional Page* does not flow text around graphic outlines, but

desktop publishing packages. *Pro Page* doesn't have it, and it's too bad that the literature is misleading.



Digitized cover using Digiview.

There are a few other minor annoyances, but they involve minutiae that we don't need to get into here. Suffice it to say that there are enough problems to be annoying, but not enough to be fatal.

There's a lot of power in this package. *Professional Page* is a truly professional tool, and producing this issue of *INFO* with it has been an exciting process. We can't wait to see what we can accomplish once we become really familiar with all of its features. So far, we feel like we've only scratched the surface!



PROFESSIONAL PAGE

We produced the majority of this issue using *Professional Page* and a QMS PS-810 laser printer. The combination is a real desktop publishing powerhouse that puts professional power at the hands of the fairly well-heeled amateur.

A truly professional desktop publishing package, *Professional Page* is a real desktop publishing powerhouse that puts professional power at the hands of the fairly well-heeled amateur.

245075100127

A full sized 4X4 thumbnail of this article shows the finished pages with only the thumbnail missing.

LASER PRINTERS:

TWO OF THE LATEST

The latest generation of laser printers is based on new smaller, less expensive, and more efficient "laser engines". The two new models we take a look at here both have the same "guts"—the new **Canon LBP-SX** laser engine. It produces blacker blacks and a higher quality, less-prone-to-streaking output in a package that is about half the size of Canon's original print engine. The differences in these two printers lie in the electronics and control circuitry they surround the mechanical print apparatus with.

THE HEWLETT-PACKARD LASERJET II

We've been using a *Hewlett-Packard LaserJet Plus* to produce INFO since issue #10, so the new *LaserJet II* held few surprises for us. It is physically much smaller than the *LaserJet Plus*, which is a characteristic shared by all of the printers using the new generation of laser engines. At 50 lbs., it's also about 30% lighter. Like the earlier HP models, this one has both serial and parallel ports. Physically, the *LaserJet II* is very different from its elder siblings. The paper feed tray, which fit almost completely inside the older models, juts out six inches in front of the new smaller case. The paper path is also much different—printed sheets came out of the front of the *LaserJet* and *LaserJet Plus* and stacked right-side-up in reverse order on a removable tray. If you printed a document that was longer than a single page, you had to recollate the pages in the proper order by hand. The *LaserJet II* has a 100-sheet bin on top that properly collates output face-down, eliminating hand re-ordering.

The front control panel on the *LaserJet II* is an order of magnitude more versatile, too. It allows manual setting of most of the printer's attributes, from default font to input port selection to number of copies. An LCD display replaces the older cryptic

numeric readout and provides error and option-selection messages in plain English.

The *LaserJet II* comes with what HP calls six built-in fonts, though by our count there are two fonts in a total

HP LaserJet II \$2495
Hewlett-Packard
3000 Hanover St.
Palo Alto CA 94304
800-367-4772

HP's latest laser printer is easy-to-use, compact, and produces crisp, black output. The front control panel is great, providing complete fingertip control over almost every aspect of this versatile printer's operation. Comes with 512K standard RAM, expandable to 4.5 megs—you'll need at least 1 meg if you want to print full-page 300 dpi graphics. 2 font cartridge slots, and it collates printed output correctly. Has a great self-test mode, and warms up quickly. A wider selection of built-in fonts would be nice—almost everyone will want to add the "F" or the "Z" font cartridge. MB

INFO-rated



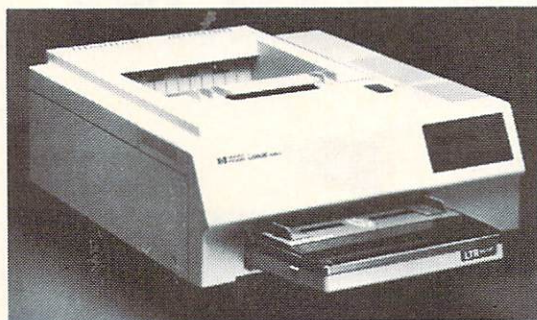
of six styles. It has 100% more font cartridge slots than the older HP laser printers, with two. The slots are software-selectable, and the cartridges are the same as before. Additional font carts, of which there are over 20, range from \$150 to \$250 each. Almost everyone will want to add either the "F" or the "Z" cartridge for their excellent selections of Times-Roman and Helvetica typestyles. The "Z" cart has a better selection of fonts, but most software now supports only the "F" cartridge, which isn't bad either. You can also use softload fonts, but the *LaserJet II*'s 512K of RAM, the same

as in the *LaserJet Plus*, is not enough to make heavy use of softload fonts. Nor is it enough to do full-page 300 dot-per-inch graphics dumps. You'll need to plug an expansion memory card into its single internal RAM slot for that. A 512K card lists for \$495, and you can get 2 meg (\$995) and 4 meg (\$1995) cards.

This printer uses HP's PCL (Printer Control Language), which makes it compatible with the Amiga's *LaserJet Plus* driver, *Vizawrite* on the C128, and many other applications. *City Desk*, *PageSetter*, and *Publisher 1000* can all address it for desktop-publishing purposes. We've been using *City Desk* for occasional page layout work with excellent results.

Throughput of the new printer is 8 pages per minute, and the lifespan of the toner cartridge is about 4000 pages, with a list price of \$115. That's not quite 3¢ a copy, plus the price of the paper. Laser printer throughput, by the way, is figured on how long it physically takes the print engine to chug out a copy of a page it has already printed once. Getting the page into the printer's memory, especially if it includes a lot of graphics, will take longer.

It's a nice printer. The print quality of the new Canon engine is blacker and cleaner than the old one. The *LaserJet II*'s case is smaller, the controls better, and just not having to restack all the output by hand is a major aggravation reliever. At \$2495 list, it's also considerably cheaper than the previous generation. Hewlett-Packard is not known for being a discount price leader, but we've already seen the *LaserJet II* selling for around \$1800 or so. If you don't need *PostScript*, this is one of the best laser printers you can buy.



HP LaserJet II
(left)



QMS PS-810
(right)

QMS PS-810

QMS has been making laser printers for a long time. (Of course, a long time in the laser printer business is still not very long at all.) They've incorporated everything they've learned into their new *PostScript*-based PS-810 printer. We haven't had the chance to use their printers in the past, but we're impressed with this one.

The PS-810 uses the same print engine as the HP *LaserJet II*, but it gets much more out of it, thanks to *PostScript*. Of course, for a price difference of \$3000, I suppose one should expect a few extra bells and whistles.

Printer throughput, cartridge life, blackness of output—everything we said about those attributes of the *LaserJet II* hold true for the PS-810. They are all features of the laser engine itself.

Physically the units are similar, too, with the same low profile. The PS-810 doesn't have the versatile front-panel controls of the LJII. In fact, it has no controls at all, except for a single 10-position switch on the back. This switch selects the input path (serial or parallel) and the printer's emulation mode: *PostScript*, HP *LaserJet Plus*, *Diablo 630*, or HP 7475A plotter. The ability to emulate an HP printer or plotter really expands the utility of this printer, and makes it compatible with most of the software

on the market. Without HP emulation, Amiga owners would be left upstream without propulsion, since there is no standard Amiga *PostScript* printer driver. (One is available in the public domain, but we haven't had a chance to test it yet.) The plotter emulation is a real boon to those who need high-quality output for CAD applications like *Aegis Draw Plus*.

PostScript exists for basically one reason: desktop publishing. And that's where the true power of this printer comes through. With the right software, there is practically no limit to

package for the Amiga is *Professional Page*. The majority of the pages in this issue were produced with *Professional Page* and the QMS PS-810.

Surprisingly enough, though, no desktop publishing package will ever take full advantage of all of this printer's capabilities. For that, you still need to send *PostScript* commands directly to the printer. There are some masochists out there who do just that, and the results can be absolutely amazing. Though there are no pure-*PostScript* driver programs for the Amiga yet that we know of, there is a nationwide BBS run by longtime electronics guru Don Lancaster which supports *PostScript* Purists, and they have a growing Amiga involvement. The number is 409-244-4794.

Is the PS-810 a good deal? At \$5495, it's costly, though we've seen it discounted to around \$4600. It's cheaper than the previous generation of *PostScript* laser printers, and its emulation

modes make it compatible with lots of software. If you're in a situation where you need high-quality letter output, desktop publishing capability, and plotter emulation, a single PS-810 could actually save you money over buying separate printers and plotters. And its output is a level of magnitude better than the previous generation, thanks to the new laser engine technology. Our only complaint is its lack of front-panel controls. The QMS PS-810 is an excellent device.

QMS PS-810 \$5495
QMS Inc.
One Magnum Pass
Mobile AL 36618
205-633-4300

An excellent second-generation *PostScript* laser printer with a low profile and clean, black output. 35 resident fonts, scalable upwards from 4 pt. Does rules, boxes, halftones, pattern fills, and more. 2 megs of RAM, with 3 megs optional. Emulates HP LaserJet +, Diablo, and HP plotter. Lacks front panel controls, but otherwise extremely versatile. MB

INFO-rated



what you can print. The PS-810 has 35 resident fonts in nine typestyles, all of them upwardly-scalable from 4 points. Thanks to *PostScript*, the printer is also capable of rotating all of its fonts in one degree increments. It will also do ruled lines, boxes, halftone screens, pattern fills, shadowing, and more. Of course, the trick is finding software that can address all of that capability.

PageSetter now has a *PostScript* add-on module, and so do *Publisher 1000* and *City Desk*. But the premier Amiga *PostScript* desktop publishing





AMIGA WORD PROCESSORS

PART II

by Peggy Herrington

KINDWORDS

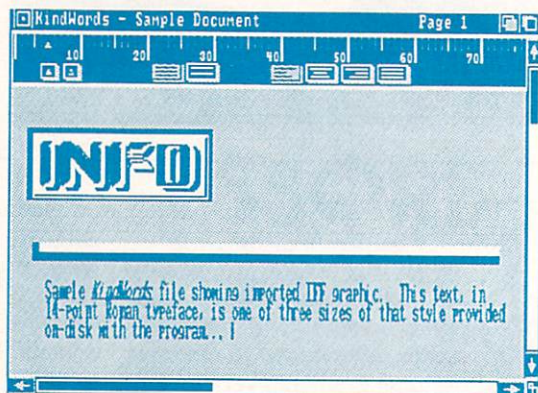
KindWords is an Amiga word processor with the ability to import IFF graphics and print them in black and white or color on an appropriate printer. It uses special fonts or your printer's default font and has a 90,000-word integrated spelling checker and mail merge for personalizing form letters.

Although *KindWords* will run in 512K, at least 1-megabyte of memory is recommended, especially for graphics. It is intuition-based with mouse operation and extensive alternate commands using the keyboard, function keys and numeric keypad. Text is selected with double and triple mouse-button clicks for editing with the Amiga clipboard. Screen sliders along the left and bottom scroll through documents (which can be up to 200 characters across and of unlimited length). A hideable onscreen ruler lets you set margins, tabs, indents, line spacing, text alignment and justification by paragraph. Although you cannot open multiple windows, you can insert disk files in a document. They may be saved or read in IFF format or ASCII.

So far, so good, but *KindWords* (version 1.2) includes just one font,

Roman type-face in 8, 12 and 14 point, along with a set of 39 symbols for lines (with intersections and corners) and things like tiny arrows, musical notes, pointers and hands. Also included are some foreign accent fonts. While they can all be used plain, **bolded**, *italicized*, underlined and in super and subscripts (as can the default font in your printer), *KindWords* won't accommodate standard Workbench fonts, *Calligrapher's* or those I tried from the public domain. Even reassigning them doesn't work because *KindWords's* font menu still offers only its fonts which are loaded when you print.

If you have one of several printers and can live with this limitation, you may find that *KindWords's* output is superior. Printer enhancements called SuperDrivers are supplied. Used with *KindWords* fonts, they produce (says the manual) 4 times as many dots per character as standard fonts -- tough to judge when you can't print standard fonts with *KindWords*, or *KindWords* fonts with other software. Super-



KindWords

Amiga driver (for 24-pin resolution try the LQ-800 file from public domain *ELQ.ARC* by Frederick W. Kohler, Jr.) and the properly renamed SuperDriver must be in the devs/printers directory on the program disk. Although instructions for installing them are terse (which rather sums up the 50-page manual), I found printing crisp and problem-free except for Gurus when I used high resolution at 8 l.p.i.

IFF graphics in low or medium resolution can be successfully imported and cropped or resized with the mouse. *KindWords* will show 4, 8 or 16 colors onscreen creating a new (unchangeable) palette if the image uses more, although an alternate display shows the original colors (so you can see what you're missing, I guess). But (like *VisaWrite* and unlike *ProWrite*) you cannot enter text beside an image, only above or below it, which also means you can't put a font box around it.

Considering font limitations (SuperDrivers notwithstanding), an inability to handle text beside graphics and numerous Guru appearances, I think I'd wait for a second release before opting for *KindWords*.

KindWords \$99.95
The Disc Company
3135 South State Street
Ann Arbor, MI 48108
313/665-5540

INFO-rated

★ ★ ★ +

Word processor that imports, crops and resizes IFF graphics (no text beside them though). Prints in B/W or color with enhanced Prefs drivers for MPS 1000, Imagerwriter II, Okimate 20, Epson JX-80, 8- and 24-pin printers. V1.2 has Roman type-face in 3 sizes, symbols and foreign accents but won't handle standard Amiga fonts. Mouse or keyboard operation, 90,000-word spell checker, mail merge and Gurus! 1-megabyte recommended, not copy-protected. PH

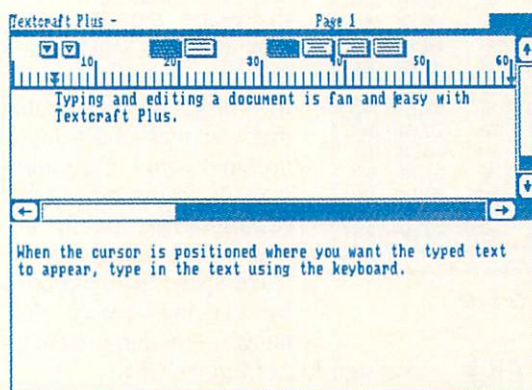
TEXTCRAFT PLUS

Textcraft Plus is aesthetically based on its predecessor, *Textcraft*, also from Commodore/Amiga, but it's more useable over the long-run. While both are intended for the ultimate novice, the original *Textcraft*'s junky screen and clever but annoying animated cursor are no longer in evidence.

This one's heavy on "user-friendliness" (doesn't that phrase almost make you gag?). Rather than confusing the issue with a spelling checker, fonts or graphics, *Textcraft Plus* is loaded with help screens and animated tutorials--29 of them, in fact--explaining how to use the program, which is a straight word processor. The manual (90+ clearly-written pages including an index, housed in a sturdy 3-ring binder) is 100% tutorial in scope, with screen shots on nearly every page. Combined with the tutorials, this is a great and wondrous solution for a beginner swamped in jargon, but once you've graduated to second grade, these features have been known to bring on a sudden death wish. Fortunately, like all good teachers, *Textcraft Plus*'s tutorials fade into the background once you have the gist of things, staying there unless you holler for help.

READY-MADE FORMS

In fact, it may take you a while to get around to using all the ready-made forms it provides: business letter and memo, business and technical report, three kinds of resumes, two bibliographies, term paper (no numbered footnotes, though) and envelope. "Provided" means that you don't have to design or lay-out these documents on the screen (and hence, on paper). You simply type your information into lines on pulldown requestors that prompt you for name, address, subject, etc., and then enter the body of the text



Textcraft Plus

using the word processor. Preset forms are in strict, unalterable formats for entry, but after you've input your data, with a little experience they are fairly easy to personalize on the screen before printing. You can also build files of names, addresses and text inserts for using the mail merge feature which individualizes form letters and type foreign language accents directly from the keyboard using ALT key combinations.

MOUSE OR KEYBOARD COMMANDS

Textcraft Plus puts page breaks, font styles, headers and footers on the screen. It lets you use the mouse to set margins on an optionally hideable on-screen ruler, justify and center text, and edit with cut, copy, paste, erase and undo using the Amiga's clipboard for compatibility with other programs when multitasking (which requires more than 512K of memory). Something I par-

ticularly like is that you can choose whether to use the mouse or alternate keyboard combinations for everything, including setting plain, boldface, underline, italics, super and subscript type styles for Preferences printers. Documents may be saved out (or read in) using IFF file format which includes layout and type style information, or ASCII format which only saves the text itself with paragraph

breaks for compatibility with other programs and brands of computers. For some strange reason, it won't load in files saved under the older *Textcraft* format. That may make upgrading more difficult, though it won't be a problem for the wordprocessing novices this program is aimed at.

SIMPLICITY ITSELF

I didn't encounter any problems using the program, although I missed more sophisticated features and an integrated spelling checker. It's not for the pros, but if you're just beginning with word processing or know someone who is, *Textcraft Plus* is a good place to start. Check it out.

Textcraft Plus \$99.95
Commodore Business Machines, Inc.
1200 Wilson Drive
West Chester, PA 19380
215/431-9100

Excellent for the Complete Novice: 29 disk-based tutorials, help screens and easy-to-understand manual that teach using the mouse with pulldown menus, requestors and keyboard shortcuts while you process words without the cutsey stuff in *Textcraft*. Mail merge but no spell checker, fonts or graphics. Includes 11 ready-made forms for letters, reports, term papers, bibliographies and resumes. Runs on 512K, multitasks with more. No copy protection. Will not load earlier *Textcraft* files. PH

INFO-rated



SoftWood Write & File

DFI:DemoFiles/Listings.FLR

	Dwelling	Location	Beds	Baths	Garage	Pool	Price	OK
88	House	Flagstaff	3	2.5	2	No	\$98,000	Yes
89	Townhouse	Phoenix	3	2	No	No	\$98,000	No
90	House	Barstow	3	2	2	No	\$98,000	No
91	Apartment	Long Beach	2	1	N	No	\$88,000	No
92	Townhouse	Phoenix	2	1.5	Port	No	\$85,000	Yes
93	House	Flagstaff	3	2	2	No	\$88,000	No
94	Townhouse	Banning	2	2	N	Yes	\$77,000	No
95	Apartment	Sedona	2	2	2	Yes	\$77,000	No
96	Apartment	Redlands	3	2	N	No	\$66,000	Yes
97	Apartment	Tucson	3	2	Y	Yes	\$68,000	No
98	Townhouse	Apache Junction	3	2	2	No	\$68,000	Yes
99	Townhouse	Tucson	2	1.5	No	No	\$68,000	No

Softwood Write & File

SOFTWOOD WRITE & FILE

Write & File is an introductory level WYSIWYG (Whatyouseeiswhat-youget) word processor that prints standard Amiga fonts in various sizes via Preferences-addressed printers. It offers a 100,000 word spelling checker and integrated database with 4-function math and logical operators. Requiring 1-megabyte of memory and 2 disk drives, memory permitting, it will multitask.

Although there are some keyboard shortcuts, the mouse is used to adjust margins and set tabs on on-screen rulers (which can be hidden), change fonts and pages or scroll through text. It's fully WYSIWYG showing fonts, super- and subscripts, and multiple-line headers and footers as they will appear on paper, God and your printer willing. It does binding margins but no text columns or graphics. A "smart cursor" shows text reminders appended to the pointer that change as you point at icons and sliders. Selecting text with double and triple clicks is handy (mousey?) for editing.

Write & File is attractive in design and appearance but screen refresh is slow compared to *Scribble!*, which isn't graphics-oriented, although it seems faster than *ProWrite*, *VisaWrite* or *KindWords*, which are. File-size is limited to available memory and you

reassign fonts from the CLI.

NON-STANDARD REQUESTORS

While it accommodates ASCII

cannot append files. The package comes on two disks -- Workbench, containing the program and the other, the dictionary. The program reads standard Amiga fonts from its own disk, and because that disk arrives full (even missing some CLI commands), to use other fonts (*Calligrapher*, public domain, etc.), you'll have to make space for them on it by deleting unused data unless you know how to

ally replace an ASCII file of the same name. Clicking on another box cycles through disk drives but again, listing Documents before you can interrupt. Tedious if you're searching disks for something.

INTEGRATED DATABASE

Write & File's database is conveniently organized in rows and columns like a spreadsheet. It will hold up to 32 columns per row using 11 definitions including IFF graphics and sound which may be viewed/played with *SoftWood's File II*gs program. You can add, subtract, multiply and divide figures, and sort or search entries using logical operators in ascending or descending order. You can merge lists from database files into letters and use the word processor to make templates for reports. Very flexible, once you get the hang of it.

UH OH!

The manual has tutorial and reference sections and I found it well-written right down to the index. Although *Write & File* is simply "Made For Mousers" and my findings on screen-refresh, fonts and disk requestors deal more with convenience than functionality, version 1.0 is somewhat unstable. After several encounters with the Guru, I quit trying to use it seriously. An upgrade is no doubt in the works, so (as always) be sure to mail your registration card. Geared for casual use, without Gurus, I'd say *Write & File* is a winner for a beginner.

Write & File \$99.95
SoftWood Company
P.O. Box 90331
Santa Barbara, CA 91390
805/966-4662

Distributed by Brown-Wagh

Attractive, entry-level WYSIWYG word processor showing headers, footers, super and subscripts with spelling checker. Mouse-oriented for changing fonts, margins and scrolling text. Prints standard Amiga fonts on Preferences printers. No columns or graphics. File size limited to available memory with no append or link. Integrated database organized like a spreadsheet; mail and report merging, 4-function math. V1.0 is unstable - hope there's an upgrade! Requires 1-meg of memory, two drives, not copy-protected. PH

INFO-rated



files along with its own Document and Database formats, you must click on *TEXT ONLY* before loading or saving them because selecting a file on the requestor sets things in motion. Each time you access a disk, *Write & File*

lists Documents (and directories) and until that's finished, you can't tell it you want to see all files or just Database files. The *SAVE AS* requestor shows Documents only, which could let you unintention-

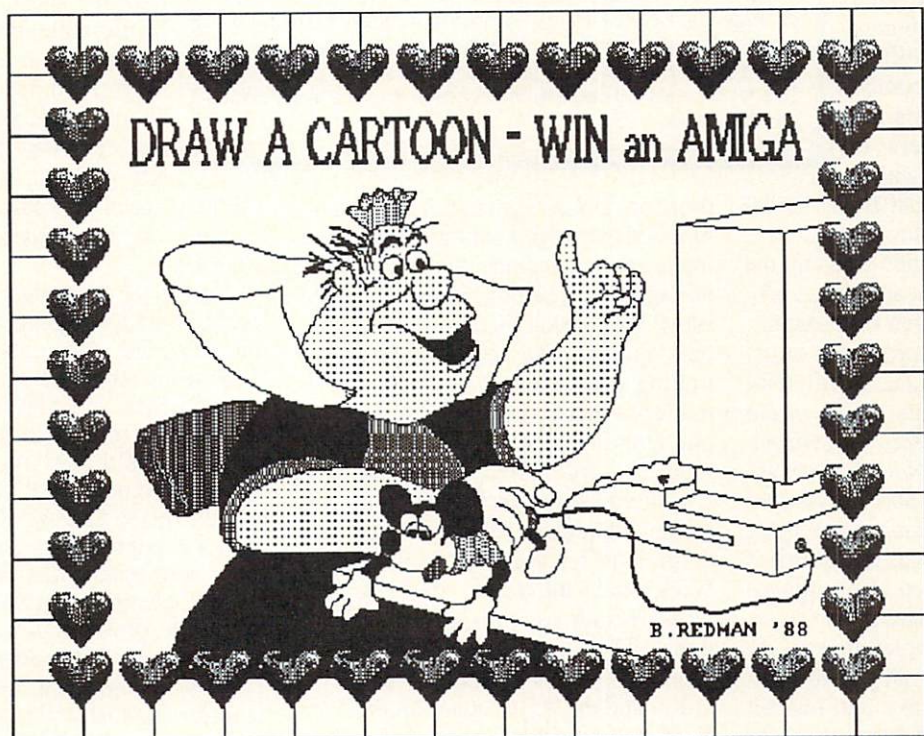


ABOUT THE AUTHOR:

Peggy Herrington is a well-known freelance writer in both the Commodore computing and music fields. She got her bachelor's degree ("in music history, English, computer science, and a smattering of other things", according to Peg) from the University of New Mexico, and works out of her home MIDI studio in Albuquerque, surrounded by Commodore computers, synthesizers, kids, and an occasional lizard.

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7. For winner's name, send a stamped, self-addressed envelope to AMIGA CARTOON CONTEST, C/O INFO PUBLICATIONS, PO BOX 2300, IOWA CITY, IA 52244.



METACOMCO ASSEMBLER & SHELL

By Robert W. Baker

The Metacomco Macro Assembler for the Amiga is a full featured 68000 macro assembler that's almost identical to the the original Macro Assemblers provided on Motorola development systems. The major difference is that the Metacomco assembler only supports the 68000 processor. There is no support included within this package for the 68010 or 68020 instructions or addressing modes.

The manual is a guide to using the assembler and does not attempt to provide detailed information on programming the 68000 microprocessor or using the Amiga computer. Further information is provided by the *Motorola MC68000 Microprocessor Programmer's Reference Manual*, the *AmigaDOS User's Manual*, and the *AmigaDOS Developer's Manual*. All of these manuals are basic, required reference material for any assembly language work on the Amiga system.

The Macro Assembler makes use of the standard Motorola mnemonics, addressing nomenclatures and register designations, the same as used by the UNIX ASM assembler package. Note that this assembler syntax and mnemonics are *not* compatible with the UNIX AS assembler and some of the assemblers provided with other language compilers. This assembler is intended for generating programs in pure assembly language.

This package also includes all the standard assembler directives, including support for sections, relocatable code, offsets, external symbols, defined constants, listing and object generation controls, plus conditional assembly and macro controls. It has all of the standard features normally found in the Motorola assemblers plus some additional listing controls.

The command syntax when invoking the assembler is similar to that used for other Amiga commands and uses an option syntax similar to that

METACOMCO
MACRO ASSEMBLER
26 Portland Square
Bristol BS2 8RZ
UK

The Metacomco Macro Assembler for the Amiga is a full featured package that follows Motorola specifications for full compatibility. It uses standard mnemonics, addressing modes, register designations, and directives. The disk also provides extensive include files for full system definitions on the Amiga, plus the Make utility and Alink linker. BB

INFO-rated



METACOMCO SHELL

Metacomco's SHELL for the Amiga provides an intelligent alternative to the CLI for those feeling more comfortable in this environment. You use the Shell just as you would use CLI, with all the usual commands and features. But the Shell has lots of built-in features that

will help speed up your normal activities and lessen the frustration level of using CLI.

To use the Shell interface, you first have to transfer a number of files from the provided disk to your favorite Workbench disk or hard disk. The main SHELL and SHELL.INFO files are moved to the System directory while a SHELLSEG file is moved to the L directory. A slightly modified version of the CLI *NewCLI* command must be copied to your C directory along with *EndShell*, a version of *EndCLI* for terminating a Shell; and *ShellRun*, that provides a version of the RUN command for use with the Shell. To make things easy, there is a batch Transfer file that will move everything to the proper place for you in one simple step. Note that all the files are designed to work with Kickstart V1.2 but there are additional files provided in the package for modifying a V1.1 system to allow the Shell to work in that environment.

Once everything is installed, the Shell can be invoked in either of two ways -- from the CLI by typing *Shell*, or from Workbench by clicking the icon in the System drawer. Note that if you install Shell on a hard disk system, the Shell will attempt to use the internal floppy (df0:) when invoked by the icon and there must be a floppy diskette in that drive. When invoked from the CLI, the current default drive and directory, plus paths are retained. After much experimentation, I have not found any way to modify the default environment when using the icon to start the Shell.

used on UNIX systems. The Assembler accepts arguments to specify the input source, include or header files; output object, listing, equate or error files; plus specifying various assembler options. The options allow controlling generation of symbol or cross reference lists, inhibiting object output, ignoring upper and lower case differences, and more. The Macro Assembler disk also includes a large collection of include files with standard definitions for the V1.2 Intuition and Workbench interfaces, plus I/O devices, resources and hardware locations. There are also two example source files plus a copy of the Make utility and the Alink linker on the disk. Note that you'll need the *AmigaDOS Developer's Manual* for a full specification of the Alink linker; the linker is not covered in the assembler manual. Also, no editor is supplied with the Macro Assembler package. You'll have to use ED or Edit that come with your Amiga, or some other sequential file editor, to create and edit source files for the assembler. The manual only covers the use of the standard ED screen editor, but almost any convenient editor should be suitable.

All in all, this is a pretty standard package, with all the expected features of a full blown macro assembler package for the Motorola 68000 microprocessor. The documentation is good and all the needed functions are provided along with some enhancements. If you want to write pure assembly language code for the Amiga, this should be an ideal choice.

Now what does the Shell add? First, and probably most important, is command line editing. Now you can cursor back and edit commands as you type them in if you notice a mistake. Plus you don't have to move the cursor to the end of the line, just press RETURN anywhere on the line to execute the command. Actually, there are a number of editing features available. You can move forwards and backwards by words, delete entire words, or delete to the end of the line. If you lose track of what you have, pressing Control-V will refresh your current command line. The Shell also keeps a history of your previous commands. Initially it records the last 10 commands, but you can adjust this number as desired. You can easily recall the history list and execute any command by simply referencing the indicated sequence number. There's even a shorthand command for executing the last command entered or you can edit previous commands before they're executed again. So, if you mistype a command line, you can simply recall the command, correct the mistake and re-execute it again without retyping the entire line again.

Normally, whenever you enter a command using the Shell, the Shell searches for that command in the current directory first and then in the C directory. A Path command is built into the Shell for specifying a desired search path for certain situations. This is not the same Path command as used with CLI; it acts exactly the same way but only effects the actions of the Shell.

If you normally move certain commands to a RAM-disk to speed things up, you'll love the *RESIDENT* command. This command allows you to make any individual command, or group of commands, resident in the system. To make any command non-resident, the *NONRES* command will unload a previously loaded and resident command. The big difference is

METACOMCO SHELL

26 Portland Square
Bristol BS2 8RZ
UK

Metacomco's Shell for the Amiga adds a number of handy and time saving features to the CLI environment. Now you can have command line editing, programmable function keys, command history and recall, resident commands and more. BB

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that resident commands can be accessed by all shells and CLIs that are running concurrently, without loading additional copies of the command for each execution. However, in order to work as resident commands the programs themselves must obey certain rules. Luckily the majority of CLI commands and Metacomco utilities are all ok.

Besides the normal *CD* command for changing directories, the Shell also includes *PUSH* and *POP* for switching back and forth quickly between directories. All you do is use the *PUSH* command instead of *CD* to specify the new directory while remembering the current directory. The *POP* command then returns you to the previous directory. For really quick changes, using *PUSH* without a directory name forces the Shell to exchange the top two items on the directory stack, putting you back in the previous directory while remembering the current directory.

The Shell allows using aliases and variables to save typing in commands just like CLI, but the Shell also allows programming the function keys for even greater flexibility. All ten function keys can be used however desired. For repetitive work, you would normally set up various aliases and variables to cut down the amount of typing you need to do on the command line. You'd normally do this every time

you start up the Shell with a number of *ALIAS* or *SET* commands. Well, the Shell allows putting these and other commands in a file that can be used whenever you start up a shell. They can be in any file you want if you don't mind adding the filename to the Shell command line. Otherwise, if you put them in a *.PROFILE* file (in the current directory) they'll be executed automatically when the Shell is started.

There are a number of other features you can customize within the Shell environment if you desire. You can easily add the command sequence number or even the task number to the command prompt. Or you can even change the Shell's special prompt character. The Shell documentation is excellent and even includes complete descriptions of each of the normal CLI commands besides the newly added features of the Shell environment. There's even an index and a quick reference guide at the back of the book.

If you like working at the CLI level, or are used to UNIX Borne or C shell features, then you'll find Metacomco's Shell a necessity and well worth adding to your Amiga collection. It's extremely handy, and an all around great time saver. Everything works as claimed; I only noticed the one small quirk when starting the Shell from an icon on a hard disk. There are similar Public Domain and shareware programs around, but they just don't seem to match up to the real thing from the people who brought us much of the original Amiga software.



ABOUT THE AUTHOR:

Robert Baker runs the popular New Products forum on Quantum-Link. He has written extensively about personal computers since the early days of this industry, and his credits include Byte, Compute! and Commodore magazines. Bob's articles were a regular feature in the pages of The Midnight Software Gazette. You can reach him on Qlink as RBaker.



MULTIFUNCTION MODULE

by Warren Block

MicroBotics' latest creation, the *MultiFunction Module*, is somewhat unusual in that it is add-on hardware for add-on hardware: the *StarBoard2* RAM expansion unit. Inside the *StarBoard* is space for a small plug-in option module. The MFM (as it is often called) is one of these modules; MicroBotics also plans to offer a SCSI hard-disk interface to occupy this space. In addition to the ubiquitous battery-backed clock, the MFM contains a socket for a 68881 math coprocessor and circuitry to provide a hardware write-protected RAM disk and parity checking for the *StarBoard's* memory. The package consists of the MFM circuit board (with a AAA battery already installed); a new PAL chip for the *StarBoard*; a four-page User Guide; a disk containing software for the various functions, and a warranty card.

Many add-on Amiga 1000 clocks can cause problems with the use or physical location of the Amiga's I/O ports, but since the MFM doesn't occupy or interfere with the operation of any of the ports, none of these problems occur. Another difference between the MFM and other Amiga clocks is the battery it uses: a standard 1.5V, AAA battery, with an expected life of one and a half to two years. Use of a commonly available and inexpensive battery is somewhat unusual in clock hardware for any type of computer; a rather rare and expensive 3V lithium battery is much more fashionable. Some of the latest hardware combines a non-replaceable battery with a clock chip into one component. The battery is supposed to last for ten years, although some reports of much shorter lifespans have surfaced. After the battery goes, the whole component must be replaced.

MultiFunction Module \$99

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An unusual board that mounts inside MicroBotics' *StarBoard2* memory expansion and provides a battery-backed clock, 68881 math coprocessor socket, parity checking of *StarBoard* memory, and both software- and hardware-based recoverable RAM disks. Its internal mounting doesn't interfere with any of the Amiga ports, and a readily available AAA battery is used for the clock. 68881 support needs improvement, documentation is very thin, but overall, a good value. WB

INFO-rated



The MFM package gives you two options for a recoverable RAMdisk. The software-only recoverable RAMdisk that comes with the MFM is called *JDisk*, or *JD0*. It works much like the famous public domain RRD by Perry Kivolowitz. The big disadvantage with the software-only approach is that programs which run rampant, overwriting random memory locations, can destroy the contents of *JDisk*. The hardware-based RRD, called *StickyDisk*, forces the *StarBoard* to act as a peripheral device rather than Fast RAM, unhooking it from the system. All of the *StarBoard* memory becomes a part of the *StickyDisk* device; none is left as Fast RAM. This all-or-nothing approach has its advantages; for instance, you can enable the *StickyDisk* device, reboot the Amiga (which now has only 512K of RAM), and run older programs that dislike expansion memory.

Instructions are careful and clear about installing the MFM. A diagram is provided, along with a three-column page of small type. Two more pages are used to describe the *StarTime*, *JDisk*, *StickyDisk*, and *StickyMemory*

programs, and the 68881 math libraries. Most of the programs involve some rather complex areas of the Amiga's operating system, and the information about them is presented in a highly compressed format. In my opinion, the documentation for the MFM is just not enough.

Another factor that counts against the MFM is that the *StarBoard* has room for only one add-on internal

card. With the MFM occupying that space, there isn't any room for MicroBotics' SCSI hard disk interface module. If finances permit, another *StarBoard* could be added to hold the SCSI interface.

The MultiFunction Module does cost more than most plain add-on clocks for the Amiga. But the hardware write-protected RAM disk and the replaceable AAA battery are valuable features that most of those other clocks don't have. The 68881 socket may be important to programmers with calculation-intensive applications. Another big plus is the fact that the MFM doesn't interfere with any of the Amiga's ports. The skimpy instructions are a flaw, but not an insurmountable one.

If you own a *StarBoard* and have no plans to get the SCSI interface module for it, the MultiFunction Module offers a lot of advantages for a fair price.



ABOUT THE AUTHOR:

Warren Block has been working with an assortment of mini and microcomputers since 1979. He studied math and photography in college, but quit to become a freelance writer and consultant. He lives in Rapid City, South Dakota, near the foot of Mount Rushmore.

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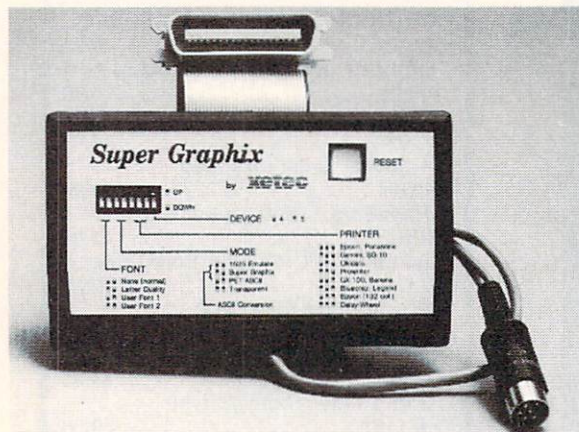
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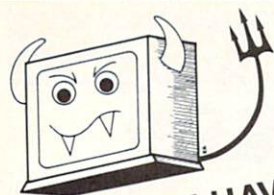
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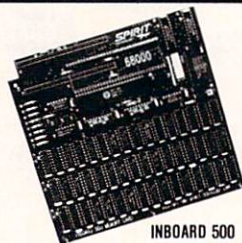
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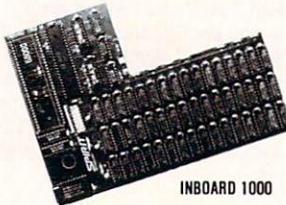
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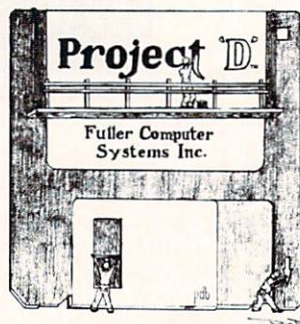
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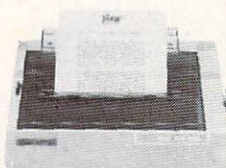
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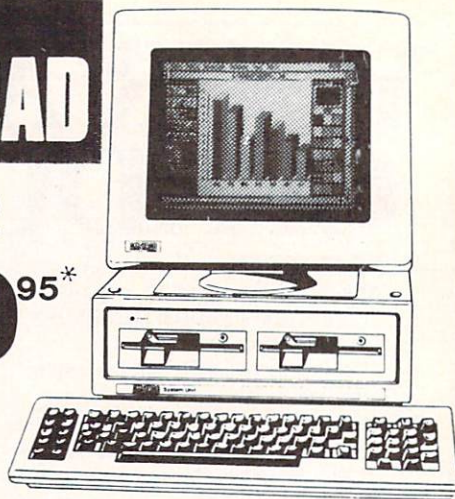
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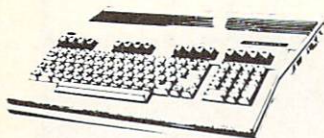
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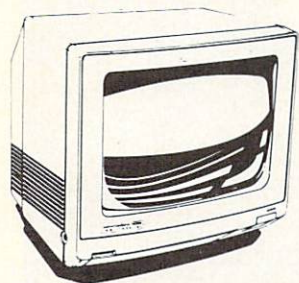
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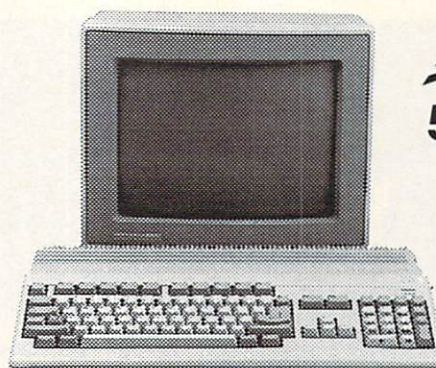
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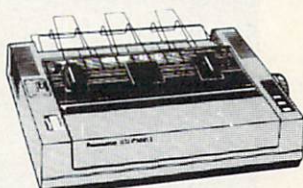
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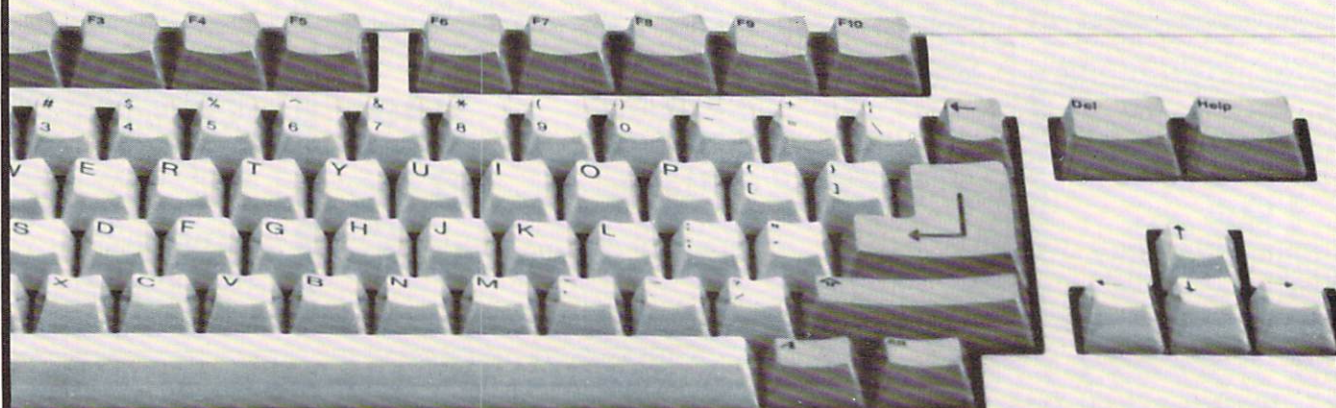
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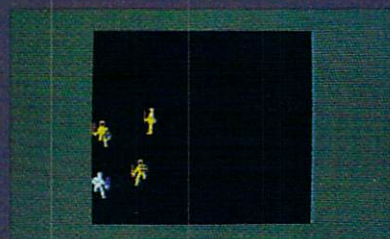


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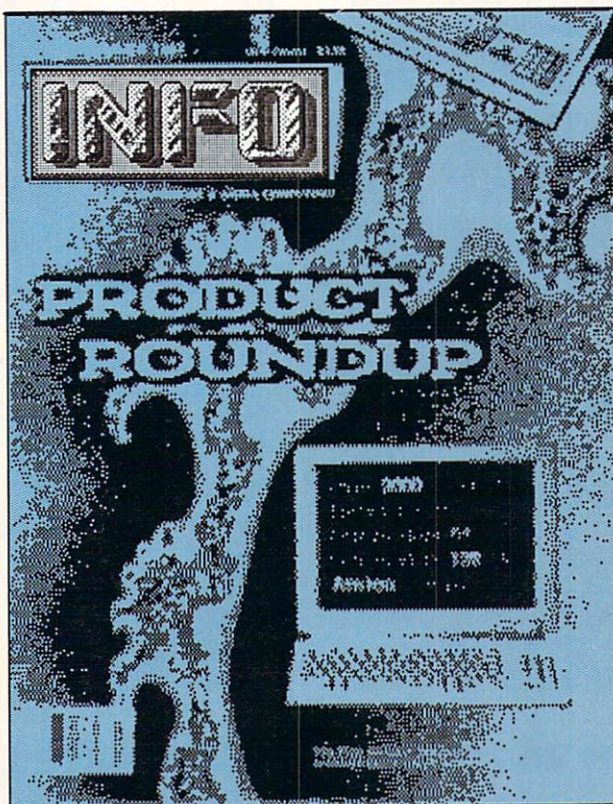
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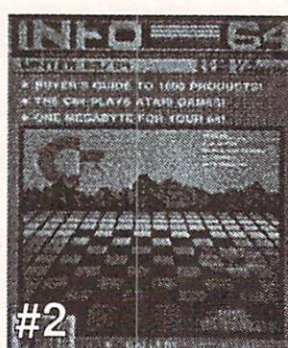
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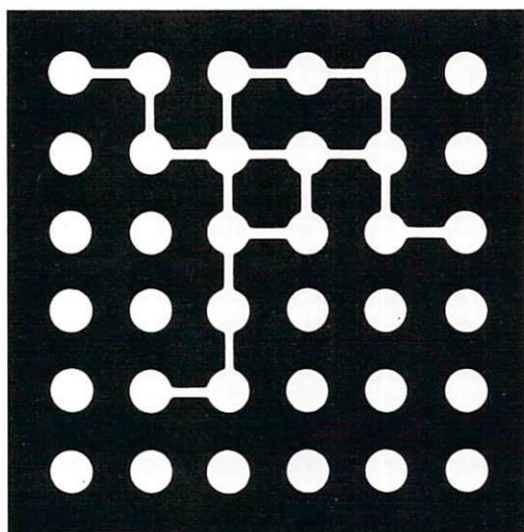
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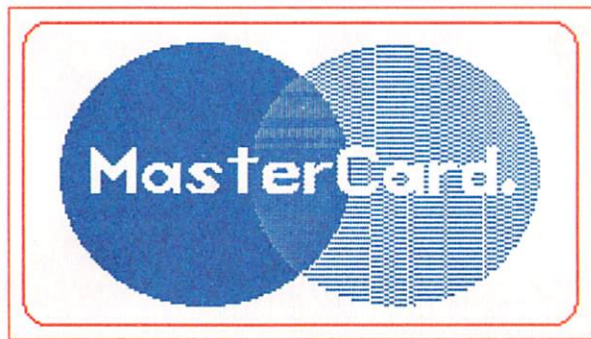
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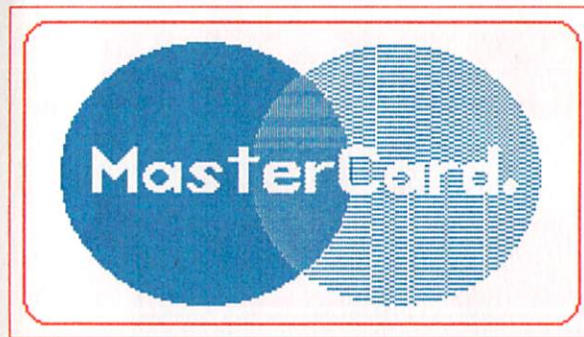
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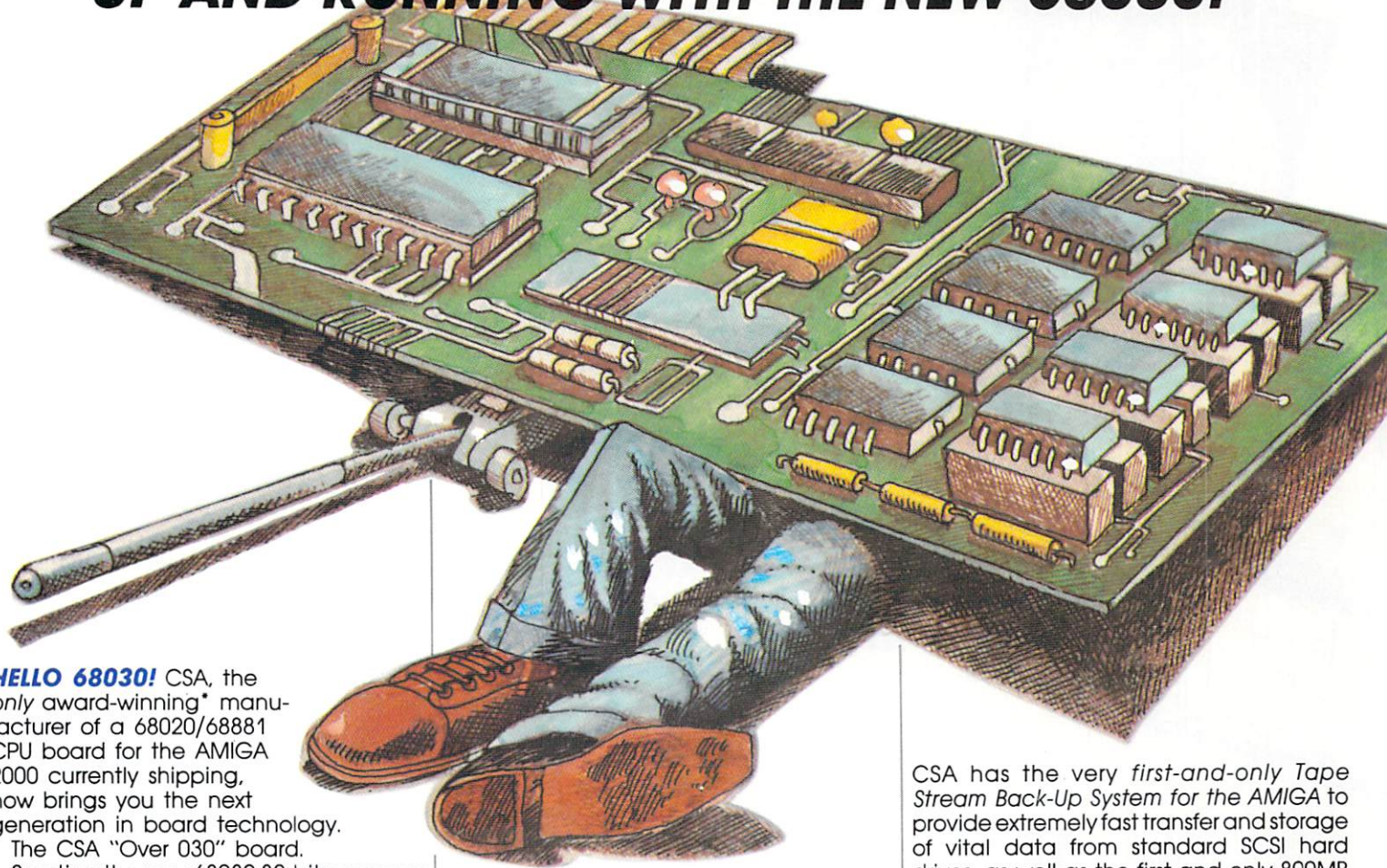
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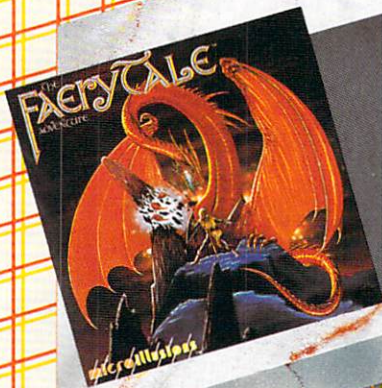


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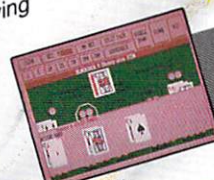
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